City of Mount Vernon, Washington
Ordinance Number 3353, dated March/14/07

AN ORDINANCE OF THE CITY COUNCIL OF THE CITY OF MOUNT VERNON, WASHINGTON, REPEALING AND RE-ENACTING MOUNT VERNON MUNICIPAL CODE CHAPTER 15.40, "Additional SEPA Guidelines;" RENAMING SAID CHAPTER "CRITICAL AREA ORDINANCE;" PROVIDING FOR SEVERABILITY; AND ESTABLISHING AN EFFECTIVE DATE.

WHEREAS, the City Council finds that the City has engaged in an extensive public process over the past two years, including the preparation of an EIS and holding a series of workshops and public hearings to receive both technical and local testimony on the issues of protecting critical areas; and

WHEREAS, the City Council finds that the draft and final EIS and best available science review as issued January 24, 2007 adequately address the science and related environmental issues and provide a sound basis for the adoption of the alternative program recommended by the Planning Commission; and

WHEREAS, the City Council adopts the recommendations set forth by the Planning Commission; and

WHEREAS, the City Council find that a legislative public hearing was conducted before the Mount Vernon Planning Commission, on the proposed ordinance and that all interested persons were allowed the opportunity an opportunity to be heard and present evidence; and

WHEREAS, on February 7, 2007 the City Council held a legislative public hearing on the Planning Commission recommendation providing additional opportunity for public comment; and

WHEREAS, the City Council finds the EIS, the Planning Commission review and recommendations, the final recommendations of state resource agencies WDOE and WDFW, and the record in this case support the adoption of the following Critical Area Ordinance for the City of Mount Vernon; and

WHEREAS, the City of Mount Vernon has broadly disseminated the program to citizens, agencies, tribes and other affected persons. Further, the City of Mount Vernon has reviewed the

Comprehensive Plan and County-Wide Planning Policies to assure compliance with the regional programs as well as the City's plans and priorities. As amended the program is consistent with both City and County planning goals, the County-Wide Planning Policies and the goals of Mount Vernon to achieve the objectives and requirements of GMA; and

WHEREAS, based on the record and materials received, the City Council after due notice, public hearings and public workshops, has made such adjustments to the Planning Commission recommendations as necessary to best achieve the objectives of no net loss of function and value of critical areas within the City, and specifically find that the goals of the Growth Management Act, the mandate to protect the functions and values of critical areas, providing a Critical Area Ordinance which is consistent with the City's adopted comprehensive plan and the County-Wide Planning Policies for Mount Vernon are best met by:

a. Adopting a critical area ordinance which promotes a combined passive/managed system, rather than a passive buffer system alone because (i)the extent of existing development within the urban area which renders passive buffer programs alone ineffective where development has already occurred up to or very near the critical area edge; (ii) a passive system alone is wasteful of urban land where buffers unnecessarily preclude development which could achieve the goal of protection of functions and values through means more appropriate to the site than simple passive buffers; (iii) the imposition of passive buffers on existing development areas reduces or eliminates incentive to redevelop the urban area, creates unnecessary hardship where structures or uses are rendered nonconforming where alternate approaches are available; and (iv) creates additional pressure to unnecessarily expand the urban boundary, likely into either farmland or flood plain areas or both.

b. The alternate approach adopted allows the City to provide a passive buffer system based upon best available science for those projects where the passive system is appropriate. The program also allows property owners to choose the alternate managed system, which the City finds more appropriate, under best available science principles applied to developed urban areas with significant portions of the existing riparian area developed, already affected by urban development activity and without existing natural habitat protections. The alternative system allows for more intensive use of existing urban lands, and the protection of streams and wetland systems on a landscape scale to assure an overall program of no net loss of function and value within the community and appropriate sub-basins. Further, the program identifies and assures the creation, preservation and enhancement of large, intact habitat patches within the urban area which provide significant overall benefit to the community and its affected waters, wetlands and habitats when compared with the ad hoc approach of a strictly passive buffer system.

c. The alternative approach provides the ability of property owners whose developed properties would otherwise be in passive buffers to avoid nonconforming use status and to achieve the ability to use, modify, and expand uses on the property already within the UGA and serviced by existing facilities consistent with the City objective of protecting the environment, providing for compact urban growth and achieve the goals of protecting existing functions and values of wetlands and fish and wildlife habitat conservation areas and providing conservation, restoration, and enhancement of critical areas and habitat, including the ability to actively address issues of invasive weeds and reestablishing some protective edges where none presently exist within the City.

d.. Recognizing a City responsibility to manage, monitor, and fund the recommended program to achieve the goals of no net loss.

e. Creating a tracking system for accounting both for funds received and expended, and for results throughout the City, and a periodic reporting mechanism to follow-up and permit the City to monitor progress.

NOW, THEREFORE, THE CITY COUNCIL OF THE CITY OF MOUNT VERNON, WASHINGTON, DO ORDAIN AS FOLLOWS:

Section 1. Mount Vernon Municipal Code Chapter 15.40 entitled "Additional SEPA Guidelines" is hereby repealed and re-enacted to read as follows:

CRITICAL AREA ORDINANCE

Chapter 15.40
CRITICAL AREAS ORDINANCE

15.40.010 Purpose and Authority

Critical areas as defined in MVMC 15.40.160 are of special concern to the city. The standards and mechanisms established in this chapter are intended to achieve no net loss of critical area function and value within appropriate basins and subbasins within the city while encouraging cost effective and

efficient use of lands within the urban areas and accomplish the city's Comprehensive Plan growth management goals. By regulating development and alterations to critical areas, this chapter seeks to:

A. General Purpose:

1. Protect the public health, safety, and welfare by avoiding or mitigating the potential adverse impacts of new development;

2. Educate the public as to the long-term importance of environmentally sensitive areas and the responsibilities of the city and private property owners to protect and preserve the natural environment for future generations;

3. Manage development activities to protect environmental quality;

4. Avoid, minimize, or mitigate potential unavoidable impacts to environmentally sensitive areas by regulating alterations in and adjacent to critical areas;

5. Provide city officials with the information they need to evaluate, approve, condition or deny public or private development proposals;

6. Protect life, health, safety, welfare, and property by minimizing and managing the adverse environmental impacts of development within and adjacent to critical areas;

7. Effectively manage limited city resources by avoiding:

a. Preventable maintenance and replacement of public facilities when critical area functioning is impaired;

b. Unnecessary costs for public emergency rescue and relief operations; and

c. Potential litigation on improper construction practices occurring in critical areas.

8. Alert realtors, appraisers, assessors, owners, and potential buyers or lessees to the development limitations in and adjacent to environmentally sensitive areas;

9. Provide predictability and consistency to the city's development review process; and

10. Assist or further the implementation of the policies of the City Comprehensive Plan, all city functional plans and policies, the State Growth Management Act, and the State Environmental Policy Act, chapter 43.21C RCW.

B. Aquifer Recharge Areas: The city relies on Public Utility District No. 1 for its potable water supply supplemented by a limited number of private wells. Most wells in the city are used for ground water monitoring. Some streams in the city or its Urban Growth Area are designated as "low flow" by the Department of Ecology pursuant to RCW 90.22 and can be affected by changes in ground water quantity. High value aquifer recharge areas coincide largely with mature forest vegetation. Therefore the purposes of the aquifer recharge area regulations are to:

1. Help maintain stream base flow to support salmonids; and

2. Provide incentives to retain forest habitat and protect ground and surface waters within a watershed by allowing innovative residential design and development techniques and limiting impervious surfaces.

C. Geologic Hazards: The purposes of the geologic hazard regulations are to:

1. Minimize damage due to landslide, erosion, subsidence, and alluvial fans through the control of development; and

2. Reduce the risks to the city and its citizens from development occurring on unstable slopes; and

3. Control erosion and sediment run-off from development.

D. Habitat Conservation Areas: The primary purpose of habitat conservation regulations is to minimize impacts to habitat conservation areas and to:

1. Protect federal and state listed habitats and species and give special attention to protection or enhancement of anadromous fish; and

2. Maintain a diversity of species and habitat within the city; and

3. Coordinate habitat protection to maintain and provide habitat connections; and

4. Help maintain air and water quality, and control erosion.

E. Streams: The purposes of the stream regulations are to:

1. Protect riparian habitat to provide bank and channel stability; sustained water supply; flood storage; recruitment of woody debris; leaf litter; nutrients; sediment and pollutant filtering; shade; shelter; and other functions that are important to both fish and wildlife; and

2. Prevent the loss of riparian acreage and functions and strive to achieve properly functioning conditions within a given stream segment where feasible; and,

3. Designate and protect aquatic habitat for salmonid species.

4. Give special attention to the protection or enhancement of anadromous fish.

F. Wetlands: The purposes of the wetland regulations are to:

1. Ensure that development activities in or affecting wetlands do not threaten public safety, cause nuisances, or destroy or degrade natural wetland functions and values; and

2. Protect wetlands by regulating development activities within and around them; and

3. Protect the public from costs associated with repair of downstream properties resulting from erosion and flooding due to the loss of water storage capacity provided by wetlands; and

4. Prevent the net loss of wetland acreage and functions.

G. Flood Hazard Areas: Flood hazard areas are regulated based on the purposes of MVMC 15.36, Floodplain Management Standards.

H. The Optional Waters Wetlands System: The purpose of the managed program of protection for wetland and water systems relies on the pairing of a conservative default program and an innovative but well supported best available science based ecosystem or landscape management program. Protection is achieved through both the default and landscape program available for use in concert. Only through this paring is the public interest served by this program.

I. Other: These regulations pertain to all critical areas, but not all critical areas have the same value or importance in a given location. Some are regulated for public safety, flood hazard, geologic hazard and aquifer recharge as it pertains to potable water. Others are regulated for their environmental benefits, and these include wetlands and Fish and Wildlife habitats, including streams. The objective of the regulations is protection of critical area functions and values within the city and appropriate ecosystem basin or subbasin with the objective of providing mechanisms to achieve no net loss of function and value within the appropriate region or sub region.

15.40.020 Applicability: Regulated, and Prohibited Activities

A. Applicability: All proposed development activities in regulated critical areas and their buffers or management zones shall comply with the requirements of this Chapter. Expansion or alteration of existing uses shall also comply with the requirements of this Chapter. Any person seeking to determine whether a proposed development activity or land area is subject to this Chapter may request a determination from the city.

B. Permit Required: Prior to any alteration of a property containing or adjacent to a critical area and associated buffer as defined in section 15.40.160 of this section, the property owner or designee must obtain a development permit, consistent with the requirements of this chapter.

1. No separate critical area permit is required for a development proposal that requires a development permit(s).

2. Permitted activities under Section D. The Director shall determine whether to grant or deny a separate critical area permit based upon compliance with applicable standards and regulations of this chapter.

C. Finding of Conformance Required: Compliance with these critical area regulations shall be a finding in any approval of a development permit, critical area permit, and/or letter of approval and such finding shall be documented in writing in the project file.

D. Permitted Activities Without Specific Development Permit:

1. The activities are permitted in both the critical area and their associated buffers unless specifically limited to buffers only subject to listed criteria.

a. Natural Resource/Habitat Conservation or Preservation: Conservation or preservation of soil, water, vegetation, fish and other wildlife. This includes: any critical area and/or buffer restoration or other mitigation activities that have been approved by the city.

b. Minor Site Investigative Work. Work necessary for land use submittals, such as surveys, soil logs, percolation tests, and other related activities, where such activities do not require construction of new roads or significant amounts of excavation. In every case, impacts to the critical area shall be minimized and disturbed areas shall be immediately restored.

c. Existing/Ongoing Agricultural Activities: Existing and ongoing commercial agricultural activities including farming, horticulture, aquaculture and/or maintenance of existing irrigation systems. Activities on areas lying fallow as part of a conventional rotational cycle are part of an ongoing operation, provided that the agricultural activity must have been conducted within the last five years. Activities that bring a critical area into agricultural use are not part of an ongoing operation. Maintenance of existing legally installed irrigation, ditch and pipe systems is allowed; new or expanded irrigation, ditch, outfall or other systems shall require new permits. For commercial agricultural activities, new permits shall require compliance with the best management practices in accordance with all labels and federal Clean Water Act requirements. The city shall identify habitat-related issues associated with ongoing commercial agriculture activities within recommended buffers and where lawful (not in violation of state or federal guidelines or requirements), shall provide mitigation to address the loss of existing functions and values within the existing city system.

d. Harvesting Wild Foods: The harvesting of wild foods in a manner that is not injurious to natural reproduction of such foods and provided the harvesting does not require tilling of soil, planting of crops or alteration of the critical area.

e. Dead or Diseased Trees: Removal of dead, terminally diseased, damaged, or dangerous ground cover or hazard trees which have been certified as such by a forester, registered landscape architect, or certified arborist, selection of which to be approved by the city based on the type of information required, or the city prior to their removal. Such hazard trees shall be retained as large woody debris in the stream/buffer corridor, where feasible, and retained in wetlands and the associated buffer where feasible.

f. Operation, Maintenance, or Repair. Operation, maintenance, or repair of existing structures, infrastructure improvements, utilities, public or private roads, dikes, levees, or drainage systems, that do not require construction permits, if the activity does not further alter or increase the impact to, or encroach further within, the critical area or buffer. This includes routine vegetation management and removal of diseased or damaged trees posing a threat to public health or safety, and removal of non-native invasive vegetation or weeds listed by Skagit County or other government agency, for public and private utilities, road rights-of-way and easements, and parks.

g. Modification to Existing Structures. Structural modification of, addition to, or replacement of an existing legally constructed structure that does not further alter or increase the impact to the

critical area or buffer. Replacement shall be consistent with the city's nonconforming regulations in MVMC 17.102 and subject the procedural requirements in MVMC 14.05.

h. Activities within the Improved Right-of-Way. Replacement, modification, installation, or construction of utility facilities, lines, pipes, mains, equipment, or appurtenances, not including substations, when such facilities are located within the improved portion of the public right-of-way or a city authorized private roadway except those activities that alter a wetland or watercourse, such as culverts or bridges, or result in the transport of sediment or increased storm water; exempt activities are subject to retention and replanting of native vegetation where feasible along the right-of-way improvement and resulting disturbance.

i. Storm Water Management Facilities – Wetlands: Where buffers and setbacks are larger than 50 feet, and slopes less than 15 percent, storm water management facilities, limited to storm water dispersion outfalls and bioswales, may be allowed within the outer 25 percent of the buffer, when location of such facilities are outside of the initial 50 feet and will not degrade the functions or values of the wetland.

j. Chemical Applications. The application of herbicides, pesticides, organic or mineral-derived fertilizers, or other hazardous substances, if necessary, as approved by the city provided that their use shall be restricted in accordance with Washington State Department of Fish and Wildlife Management Recommendations and the regulations of the Washington State Department of Agriculture and the U.S. Environmental Protection Agency.

j. Emergency Activities. Those activities necessary to prevent an immediate threat to public health, safety, or welfare, or that pose an immediate risk of damage to private property and that require remedial or preventative action in a timeframe too short to allow for compliance with the requirements of this Chapter, provided that the following criteria are met at the time of or following the immediate emergency action:

i. Time Limits: The emergency shall be limited in duration to the time required to complete the authorized emergency activity; provided, that no emergency permit be granted for a period exceeding ninety (90) days except as specified in subsection (ii).

ii. Restoration Required: Require, within the ninety (90) day period, the restoration of or mitigation for any critical area altered as a result of the emergency activity (not storm related damage), except that if more than ninety (90) days from the issuance of the emergency permit is required to complete restoration, the emergency permit may be extended to complete this restoration. For the purposes of this paragraph, restoration means returning the affected area to its state prior to the performance of the emergency activity.

iii. Expiration of Emergency Authorization: The emergency exemption authorization may be terminated at any time without process upon a determination by the Director that the action was not or is no longer necessary to protect human health or the environment.

iv. Notice of the emergency action shall be given to the city and local tribe within 10 days of the end of the emergency condition (e.g. flood waters have receded to non flood conditions).

k. Navigational Aids and Boundary Markers. Construction or modification of navigational aids and boundary markers.

l. Trails and Walkways: Where buffers and setbacks are larger than 50 feet, and slopes less than 15 percent, walkways and trails are outside of the initial 50 feet, in critical area buffers located on public property, or where easements or agreements have been granted for such purposes on private property, all of the following criteria shall be met.

i. The trail, walkway, and associated open space shall be consistent with the City Park and Recreation plans. The city may allow private trails as part of the approval of a site plan, subdivision or other land use permit approvals.

ii. Trails and walkways shall be located in the outer 25 percent of the buffer, i.e. the portion of the buffer that is farther away from the critical area. Exceptions to this requirement may be made for:

Trail segments connecting to existing trails where an alternate alignment is not practical.

Public access points to water bodies spaced periodically along the trail at focused locations.

iii. Enhancement of the buffer area is required where trails are located in the buffer. Where enhancement of the buffer area adjacent to a trail is not feasible due to existing high quality vegetation, additional buffer area or other mitigation may be required.

iv. Trail widths shall be a maximum width of 10 feet. Trails shall be constructed of pervious materials. Impervious materials may be allowed if pavement is required for handicapped or emergency access, or safety, or is a designated nonmotorized transportation route or makes a connection to an already dedicated trail, or reduces potential for other environmental impacts.

v. Public access in shoreline areas is permitted as part of an approved access plan.

m. Existing structures, surfaces and activities where lawfully constructed and maintained in accordance with all other laws in effect as of the date of this ordinance.

2. Administrative approval – When Required: Except in the case of public emergencies, existing and ongoing agricultural activities and existing structures, surfaces and activities, all activities in subsection (D)(1) of this section require that a letter of approval be obtained from the Director prior to construction or initiation of activities.

3. Applicability of Section Requirements: Development activities provided with a letter of approval may intrude into the critical area or required buffer subject to any listed conditions, related permits, and in conformance with other portions of the MVMC.

4. Director Findings: In determining whether to issue a letter of approval for activities listed in subsection (D)(1) of this, the Director shall find that:

a. The activity is not prohibited by this or any other chapter of the MVMC or state or federal law or regulation;

b. The activity will be conducted using best management practices as determined by the city using industry standards and/or applicable federal and state agencies or scientific principles;

c. Where critical area or buffer/management zone disturbance has occurred in accordance with an activity pursuant to a letter of approval, restoration of affected functions shall be required within the relevant waters wetlands system; and

d. The Director shall require a mitigation plan where permitted activity under a letter of approval is determined to have a potentially material negative effect on waters/wetlands system function, to assure such impacts are adequately restored within the waters/wetlands system.

5. Notices. If a Notice of Application is required for a development permit associated with the permitted activity, the notice shall describe the CAO-related activity.

E. Flood Hazard Regulations Applicability and Exemptions: See MVMC Chapter 15.36.

15.40.030 Administration and Interpretation

A. Duties of Director: The Community Development and Economic Development Director (Director), or his/her duly authorized representative, shall have the power and authority to enforce the provisions of this Chapter.

B. Interpretation:

1. Director Interprets Chapter: The Director is authorized to make interpretations of this Chapter and to adopt and enforce rules and regulations supplemental to this Chapter as he/she may deem necessary in order to clarify the application of the provisions of this Chapter. Such interpretations, rules and regulations shall be in conformity with the intent and purpose of this Chapter.

2. Abrogation and Greater Restrictions: It is not intended that this Chapter repeal, abrogate, or impair any existing regulations. However, where this Chapter imposes greater restrictions, the provisions of this chapter shall prevail.

3. Minimum Requirements: The provisions of this Chapter shall be held to be minimum requirements in their interpretation and application and shall be liberally construed to serve the purposes of this Chapter.

4. Absence of Valid Scientific Information: Where there is an absence of valid scientific information or incomplete scientific information relating to a critical area leading to uncertainty about the risk to critical area function of permitting an alteration of or impact to the critical area, the Director shall:

a. Take a "precautionary or a no-risk approach" that appropriately limits development and land use activities until the uncertainty is sufficiently resolved, or determine that protection can be ensured by using an approach different from that derived from the best available science provided that the applicant demonstrates on the record how the alternative approach will protect the functions and values of the critical area; and

b. Require application of an effective adaptive management program that relies on scientific methods to evaluate how well regulatory and nonregulatory actions protect the critical area. An adaptive management program is a formal and deliberate scientific approach to taking action and obtaining information in the face of uncertainty. An adaptive management program shall:

i. Address funding for the research component of the adaptive management program;

ii. Change course based on the results and interpretation of new information that resolves uncertainties; and

iii. Commit to the appropriate timeframe and scale necessary to reliably evaluate regulatory and nonregulatory actions affecting protection of critical areas and anadromous fisheries.

iv. The technical report supporting the alternative approach must identify triggers and benchmarks consistent with BAS principles, which may be used to measure progress and provide for restoration or replacement if necessary to achieve the adaptive management goals.

C. Compliance: The city shall not grant any approval or permit any regulated development activity in a critical area or associated buffer prior to fulfilling the requirements of this Chapter.

D. Reviewing Official: Wherever referenced in this section, Reviewing Official refers to the decisionmaking official or body authorized to grant permit approval for an activity.

E. Project Review and Approval Criteria: The City critical area program adopts a default and landscape optional approach to the protection of functions and values of wetlands and fish and wildlife habitat stream and riparian areas. As such, the City manages impacts and improvements on a landscape scale city wide and within basins consistent with approved best available science principles as determined through a functional assessment model. Projects requiring review and approval shall require a written finding that the project complies with the requirements of this ordinance. Such finding and approval shall be determinative on the issue of compliance with critical area mitigation and protection of functions and values for all project purposes.

F. Site evaluation model:

1. The City adopts the hydrogeomorphic (HGM) functional assessment approach recommended by the U.S. Army Corps of Engineers, U.S. Environmental Protection Agency, Natural Resources Conservation Service and other agencies. The HGM approach is summarized in Brinson, M.M., 1993, A hydrogeomorphic classification for wetlands. Wetlands Research Program Technical Report WRP-DE-4. US Army Corps of Engineers Waterways Experiment Station, Vicksburg, MS, USA; and Brinson, M.M., F.R. Haner, L.C. Lee, W.L. Nutter, R.D. Rheinhardt, R.D. Smith, and D. Whigham. 1995, A Guide Book for Application of Hydrogeomorphic Assessment to Riverine Wetlands, U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, MS, USA, Technical Report WRP-DE-11. HGM allows users to assess changes in ecosystem functions (hydrology, bio/geochemistry, plant community and faunal support/habitat) when compared to local and/or regional reference systems. Mount Vernon shall tailor current national HGM Guidebooks to focus on pertinent waters/wetland subclasses within the City and/or GMA. Mount Vernon will use their HGM systems rather than the WDOE wetland rating model for purposes of measuring both impacts to and benefits from activities in critical area and buffers. The Director shall publish a guide to using the HGM model in Mount Vernon as part of a regulatory guideline program. Until such manual is adopted as a City regulation, property owners may use national HGM techniques to evaluate both the impact of a proposed change and the benefit of proposed mitigation consistent with guidelines outlined Brinson, M.M., F.R. Haner, L.C. Lee, W.L. Nutter, R.D. Rheinhardt, R.D. Smith, and D. Whigham, 1995, A Guide Book for Application of Hydrogeomorphic Assessment to Riverine Wetlands, U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, MS, USA, Technical Report WRP-DE-11, to assure that the project will not reduce function and values of critical areas within the affected basin.

2. The City adopts WDOE 2005 Storm Water Manual for Western Washington, Vol. II, Chapter 4, as the best management practices guideline for stormwater/erosion control in all developments subject to review under this chapter.. A requirement of the optional wetlands and waters option is that all stormwater on or crossing a property proposed for developed shall be captured and treated as required by such manual before discharge to any wetland or waters regulated under this ordinance.

3. Best management practices adopted for the Mount Vernon waters/wetlands reserve program shall be consistent with principal enunciated in (a) Knudsen and Neff, Washington Department of Fish and Wildlife's "Management Recommendations for Washington's Priority Habitat: Riparian;" (b) Committee on Wetland Mitigation, National Research Council, 2001, Compensating for Wetland Loss under the Clean Water Act, National Academy Press, Washington, D.C.; (c) Brinson, M.M., F.R. Haner, L.C. Lee, W.L. Nutter, R.D. Rheinhardt, R.D. Smith, and D. Whigham, 1995, A Guide Book for Application of Hydrogeomorphic Assessment to Riverine Wetlands, U.S. Army Corps of Engineers, Waterways Experiment Station, Vicksburg, MS, USA, Technical Report WRP-DE-11; (d) Wetlands in Washington Volume I, Hruby, T., T. Granger, K. Brunner, S. Cooke, K. Dublonica, R. Gersib, T. Granger, L. Reinelt, K. Richter, D. Sheldon, E. Teachout, A. Wald, and F. Weinmann, 1999, Methods for Assessing Wetland Functions, Volume 1: Riverine and Depressional Wetlands in the Lowlands of Western Washington, Part 1: Assessment Methods. WA State Department of Ecology Publication #99-115; and (e) Wetlands in Washington Volume II, Hruby, T, S. Stanley, T. Granger, T. Duebendorfer, R. Friesz, B. Lang, B. Leonard, K. March, and A. Wald. 2000,Methods for Assessing Wetland Functions,Volume II, Part 1: Assessment Methods – Depressional Wetlands in the Columbia Basin of Eastern Washington, WA State Department of Ecology Publication #00-06-47.

15.40.040 Submittal Requirements

A. General Requirements: When a regulated critical area or associated buffer is identified, the following procedures apply.

1. Preapplication Consultation: Any person seeking a permit from the city to develop properties known or suspected to have critical areas present shall schedule a preapplication conference with the city pursuant to adopted scheduling procedures. Preapplication consultation and planning will help

applicants identify regulatory requirements under this section and assure integration of critical area planning into overall project design.

2. Submittal Requirements:

a. Plans: When an application is submitted for any regulated activity, the location of the critical areas and buffers on the site shall be indicated on the plans submitted based upon an inventory provided by a certified professional, as identified in sections (B) through (G) below.

b. Waivers: The Director may waive any of the requirements of this subsection if the size and complexity of the project does not warrant a step in the proceeding, as identified in sections (B) through (G) below.

c. Independent Secondary Review: When appropriate due to the type of critical area present, or project area conditions, the Director has the authority to require the applicant to prepare and/or fund additional analyses or activities, including, but not limited to:

i. An evaluation by an independent certified professional regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, to include any recommendations as appropriate. This shall be paid at the applicant's expense, and the Director shall select the third party review professional. Independent review shall be required for activities that are altering a critical area or buffer and are required to prepare supplemental studies and/or mitigation plans. Independent review for standard studies is discretionary and may be required by the Director; and/or

ii. A request for consultation with the State of Washington Department of Fish and Wildlife, Washington State Department of Ecology, State Department of Natural Resources, or Skagit System Cooperative, or the Upper Skagit Tribe, or other appropriate agency.

3. Fees: See MVMC 14.15.

B. Aquifer Recharge Area Studies: If a project proposal is designed in conformity with the Low Impact Development Technical Guidance Manual for Puget Sound, January 2005, or an equivalent manual determined by the Director, and the post-project average infiltration rate for the site will be no less than the permeability for the undisturbed native soil as indicated in Table 14 of the Soil Survey of Skagit County Area, Washington (USDA Soil conservation Service, 1989), the city may require an applicant to prepare a Phase 1 reconnaissance level hydrogeologic report. For project proposals not designed in conformity with the Low Impact Development Manual referenced above, a Phase 2 hydrogeologic investigation report shall be required. Hydrogeologic reports shall be prepared by a certified professional at the applicant's expense. Peer review of the applicant's report may be required by the city at the applicant's expense pursuant to section (A)(2)(c) above.

C. Flood Hazard Regulations: See MVMC Chapter 15.36.

D. Geologic Hazard Area Studies:

1. When Study is Required: Whenever a proposed development activity requires a development permit and a geologic hazard is present on the site of the proposed development or on abutting or adjacent sites within 200 feet of the subject site, geotechnical studies shall be required consistent with report requirements in MVMC 15.40.160. Specifically:

Such a report(s) shall be prepared by a certified professional at the applicant's expense.

2. Slopes between 15 and 40 Percent: A geotechnical study shall address the hillside development standards for properties containing slopes between 15 and 40 percent.

3. Mitigation Plan Required: A mitigation plan shall be required by the Director if alteration of the geologic hazard area is proposed and mitigation measures need to be established for the regulated activity. A mitigation plan is only required for slopes between 15 and 40 percent if the geotechnical report identifies a need for requirements beyond the hillside development standards.

4. Geotechnical Study or Mitigation Plan Waiver: May only be waived by the Director when the applicant provides satisfactory evidence that:

a. The geologic hazard or slope between 15 and 40 percent does not intrude on the applicant's lot, and based on evidence submitted, the proposal will not result in significant adverse impacts to nearby geologic hazard areas or other slopes between 15-40 percent; or

b. Applicable data and analysis appropriate to the project proposed exists and an additional study is not necessary.

5. Peer Review: Peer review of the applicant's geotechnical report may be required by the city at the applicant's expense pursuant to section (A)(2)(c) above.

E. Habitat Conservation Areas: The city shall require a habitat/wildlife assessment for activities that are located within or abutting a habitat conservation area or that are adjacent to a critical habitat, and have the potential to significantly impact a critical habitat. Such a report shall be prepared by a certified professional at the applicant's expense. The assessment shall determine the extent, function and value of the critical habitat and potential for impacts and mitigation consistent with report requirements in MVMC 15.40.160. In cases where a proposal is not likely to significantly impact the critical habitat and there is sufficient information to determine the effects of a proposal, an applicant may request that this report be waived by the Director. Peer review of the applicant's report may be required by the city at the applicant's expense pursuant to section (A)(2)(c) above.

F. Stream Studies:

1. When Standard Stream Study Is Required: Subject to the provisions of section (F)(4) below, the applicant or project sponsors for activities requiring city approval shall be required to conduct a Standard Stream Study per MVMC 15.40.160 if a site contains a regulated stream or the project area is within 200 feet of a stream even if the stream is not located on the subject property. Such a report shall be prepared by a certified professional at the applicant's expense.

2. When Supplemental Stream Study is Required: The applicant shall be required to conduct a Supplemental Stream Study per MVMC 15.40.160 if a site contains a stream or riparian management zone and alterations of the stream or alterations to management zones are proposed, either administratively or via a variance request. Such a report shall be prepared by a certified professional at the applicant's expense.

3. When Stream Mitigation Plan is Required: The applicant shall be required to conduct a Stream Mitigation Plan per MVMC 15.40.160 if impacts are identified within a Supplemental Stream Study. Such a report shall be prepared by a certified professional at the applicant's expense. The approval of the Wetland Mitigation Plan by the Director shall be based on the criteria located in MVMC 15.40.050, .100 and .160.

4. Studies Waived:

a. Standard Stream Study: May only be waived by the Director when the applicant provides satisfactory evidence that:

i. A public road, building or other long-term barrier exists between the stream and the proposed development activity, or

ii. The stream or riparian management zone does not intrude on the applicant's lot, and based on evidence submitted, the proposal will not result in significant adverse impacts to nearby streams regulated under this Chapter; or

iii. Applicable data and analysis appropriate to the project proposed exists and an additional study is not necessary.

b. Supplemental Stream Study or Stream Mitigation Plan: May only be waived by the Director when:

i. Applicable data and analysis appropriate to the project proposed exists and an additional report is not necessary.

c. Period of Validity for Stream Studies: Studies submitted and reviewed are valid for up to five (5) years from date of study completion as approved by the city unless the Director determines that conditions have changed significantly and a new or amended study is required.

d. Independent Secondary Review: Peer review of the applicant's report may be required by the city at the applicant's expense pursuant to section (A)(2)(c) above.

G. Wetlands Studies:

1. When Study is Required: Subject to the provisions of section (G)(3) below, a wetland report addressing a wetland's classification and delineation shall be prepared by an applicant as follows:

a. Wetland Assessment Identifying Classification: An applicant shall be required to conduct a study to determine the classification of the wetland if the subject property or project area is within 150 feet of a wetland even if the wetland is not located on the subject property, but it is determined that alterations of the subject property are likely to impact the wetland in question or its buffer. Wetland classification shall be performed as described in subsection 15.40.110(A) of this chapter, and the report shall include a completed wetland rating form. If there is a potential Category 1 or 2 wetland within 300 feet of a proposal, the city may require an applicant to conduct a study even if the wetland is not located on the subject property, but it is determined that alterations of the subject property are likely to impact the wetland in question or its buffer. A wetland report shall be prepared by a certified professional at the applicant's expense.

b. Wetland Assessment Identifying Delineation: A wetland delineation is required for any portion of a wetland on the subject property that will be impacted by the permitted activities. For the purpose of regulation, the exact location of the wetland edge shall be determined by the wetlands specialist hired at the expense of the applicant through the performance of a field investigation using the procedures provided in the manual**:**

2. When Wetland Mitigation Plan is Required: The applicant shall be required to prepare a Wetland Mitigation Plan per MVMC 15.40.160 if impacts are identified within a Wetland Classification or Delineation Study or if a wetland buffer alteration is proposed. The approval of the Wetland Mitigation Plan by the Director shall be based on the criteria located in MVMC 15.40.050, .110 and .160.

3. Studies Waived:

a. Wetland Classification or Delineation Study: May only be waived by the Director when the applicant provides satisfactory evidence that:

i. A public road, building or other physical barrier exists between the wetland and the proposed activity; or

ii. The wetland or buffer does not intrude on the applicant's lot, and based on evidence submitted, the proposal will not result in significant adverse impacts to nearby wetlands regulated under this section; or

iii. Applicable data and analysis appropriate to the project proposed exists and an additional study is not necessary, consistent with current rating system and mitigation standards.

b. Wetland Mitigation Plan: May only be waived by the Director when:

i. Applicable data and analysis appropriate to the project proposed exists and an additional report is not necessary, consistent with current rating system and mitigation standards.

c. Period of Validity for Wetland Studies: Studies submitted and reviewed are valid for up to five (5) years from date of study completion as approved by the city unless the Director determines that conditions have changed significantly and a new or amended study is required.

d. Independent Secondary Review: Peer review of the applicant's report may be required by the city at the applicant's expense pursuant to section (A)(2)(c) above.

H. Combined Systems: Waters/wetland ecosystems. Where streams, ponds and wetlands function jointly on a property and adjoining properties, such systems shall be addressed as a single system for purposes of all required reports and approvals.

15.40.050 General Performance Standards

A. Performance Standards: The performance standards for each critical area are specified in subsections 15.40.050 to 15.40.110 of this chapter.

B. Protection of Critical Areas: Development within critical areas and any associated buffers shall be avoided, and alterations prohibited unless permitted in accordance with the requirements of this chapter.

C. Allowed Alterations: Critical areas may be altered by authorized permitted exempt activities in MVMC 15.40.020, alterations specifically allowed in sections 15.40.060 to 15.40.110 and subject to listed criteria, or through approval of exceptions or variances in 15.40.130.

D. Native Growth Protection Areas:

1. Applicability:

a. Required: A native growth protection area shall be instituted when determined through permit review to be necessary in:

i. Landslide hazard areas and associated buffers;

ii. Streams and their associated buffers; or

iii. Wetlands and their associated buffers.

b. Applied with Discretion: Native growth protection areas may be required for habitat conservation areas and their buffers pursuant to MVMC 15.40.090.

2. Standards:

a. Trees and ground cover shall be retained in designated native growth protection areas.

b. Activities allowed in native growth protection areas shall be consistent with applicable critical area regulations.

c. The city may require enhancement of native growth protection areas to improve functions and values, reduce erosion or landslide potential, or to meet another identified purpose of this section or of critical area regulations.

3. Method of Creation: Native growth protection areas may be established by one of the following methods, or alternative determined by the Director to reliably achieve the required protection.

a. Conservation Easement: The permit holder shall, subject to the city's approval, convey to the city or other public or nonprofit entity specified by the city, a recorded easement for the protection of the critical area and/or its buffer.

b. Protective Easement: The permit holder shall establish and record a permanent and irrevocable easement on the property title of a parcel or tract of land containing a critical area and/or its buffer created as a condition of a permit. Such protective easement shall be held by the current and future property owner, shall run with the land, and shall prohibit development, alteration, or disturbance within the easement except for purposes of habitat enhancement as part of an enhancement project which has received prior written approval from the city, and from any other agency with jurisdiction over such activity.

c. Tract and Deed Restriction: The permit holder shall establish and record a permanent and irrevocable deed restriction on the property title of any critical area management tract or tracts created as a condition of a permit. Such deed restriction(s) shall prohibit development, alteration,

or disturbance within the tract except for purposes of habitat enhancement as part of an enhancement project which has received prior written approval from the city, and from any other agency with jurisdiction over such activity. A covenant shall be placed on the tract restricting its separate sale. Each abutting lot owner or the homeowners association shall have an undivided interest in the tract.

4. Fencing: The city may require permanent fencing of the native growth protection area containing critical area and buffers when the Director determines there is a substantial likelihood of adverse impact through intrusion, and such fencing will not adversely impact habitat connectivity.

5. Signage Required: The common boundary between a native growth protection area and the abutting land must be permanently identified. One sign shall be posted per lot, or every 150 feet of buffer, or as determined by the Director. Suggested wording is as follows: “Protection of this natural area is in your care. Alteration or disturbance is prohibited by law.

6. Responsibility for Maintenance: Responsibility for maintaining the native growth protection easements or tracts shall be held by a homeowners association, abutting lot owners, the permit applicant or designee, or other appropriate entity, as approved by the city.

7. Maintenance Covenant and Note Required: The following note shall appear on the face of all plats, short plats, PUDs, or other approved site plans containing separate native growth protection easements or tracts, and shall also be recorded as a covenant running with the land on the title of record for all affected lots on the title: “MAINTENANCE RESPONSIBILITY”: All owners of lots created by or benefiting from this city action abutting or including a native growth protection easement [tract] are responsible for maintenance and protection of the easement [tract]. Maintenance includes insuring that no alterations occur within the tract and that all vegetation remains undisturbed unless the express written authorization of the city has been received.”

E. Marking During Construction: The location of the outer extent of the critical area buffer and areas not to be disturbed pursuant to an approved permit shall be marked with barrier fencing easily visible in the field to prevent unnecessary disturbance by individuals and equipment during the development or construction of the approved activity. The Director shall publish standards for such fencing.

F. Discretionary – Building or Development Setbacks: The Director may require an additional building or activity setback from a critical area or buffer to ensure adequate protection of the critical area/buffer during construction and on-going maintenance of the activity. A requirement for an additional setback shall be based on the findings of a critical area report or a peer review required for the activity based upon a unique impact of the project or need of the adjoining critical area not otherwise protected by this regulation.

G. Mitigation Plan Required: For any mitigation plans required through the application of subsections 15.40.060 to .110, the applicant shall:

1. Demonstrate sufficient scientific expertise, the supervisory capability, and the financial resources to carry out the mitigation project; and

2. Demonstrate the capability for monitoring the site and to make corrections during the monitoring period if the mitigation project fails to meet projected goals; and

3. Protect and manage, or provide for the protection and management, of the mitigation area to avoid further development or degradation and to provide for long-term persistence of the mitigation area; and

4. Provide for project monitoring and allow city inspections; and

5. Avoid mitigation proposals that would result in additional future mitigation or regulatory requirements for adjacent properties, in which case adjacent property owners shall be notified through the normal notices provided in MVMC 14.05.190.

H. Mitigation Monitoring and Bonds.

1. A monitoring program shall be implemented to determine the success of the mitigation project and any necessary corrective actions. This program shall determine if the original goals and objectives are being met. The Director reserves the right to select the consultant, at the applicant's expense, to perform the required monitoring.

2. An adaptive management plan shall accompany any mitigation plan, which identifies appropriate review, monitoring and contingency response to given events or circumstances to assure the objectives of the mitigation plan are in fact achieved over time. A performance, monitoring, and maintenance bond or other acceptable security device is required to ensure the applicant's compliance with the terms of an approved mitigation plan. The amount of the performance, monitoring, and maintenance security device shall equal 150 percent of the cost of the mitigation project for a period of five years, ten years in special circumstances such as scrub shrub or forested wetlands; the Director may agree to reduce the security device in phases in proportion to work successfully completed over the period of the bond. Failure to complete any required performance, monitoring, and maintenance shall result in the forfeiture of the guarantee.

I. City Development Standards: The Director shall develop and maintain a critical area development standards manual identifying preferred standards for fencing, structures, signs and other physical improvements (including buffer restoration and enhancement options) required by this Chapter. Such standards shall be followed unless the Director determines that a proposed alternative achieves the equivalent performance and better serve the objectives of this chapter.

15.40.060 Aquifer Recharge Area Regulations

A. Description and Purpose: Ground water from aquifers provides a source of potable water and contributes to stream discharge/flow. Critical aquifer recharge areas contribute to the recharge of aquifers, springs and/or wells and are susceptible to contamination of water supplies through infiltration of pollutants through the soil. City residents rely on an essential life-sustaining safe drinking water supply. A significant portion of the city's drinking water comes from ground water supplies in aquifers. The primary goals of ground water protection regulations are to protect ground water quality by maintaining the quantity of recharge; avoiding or limiting land use activities that pose potential risk of aquifer contamination; and to minimize or avoid adverse impacts to ground water protection areas through the application of performance standards, and to comply with the requirements of the Federal Safe Drinking Water Act, Washington Administrative Code, and the requirements of the Wellhead Protection Program.

B. Classification and Designation: Critical aquifer recharge areas are those land areas that contain hydrogeologic conditions that facilitate aquifer recharge and/or transmission of contaminants to an underlying aquifer. Critical aquifer recharge areas under this section may be established based on general criteria, specifically designated due to special circumstances, or based on scientific studies and mapping efforts. Factors considered in the identification of critical aquifer recharge areas include depth to water table, presence of highly permeable soils (specifically Group A hydrologic soils), presence of flat terrain, and the presence of more permeable surficial geology. Critical aquifer recharge areas may be placed in one (1) of the following categories:

1. Category I Critical Aquifer Recharge Areas. Category I critical aquifer recharge areas are those areas where potential for certain land use activities to adversely affect ground water is high. Category I critical aquifer recharge areas include:

a. Areas inside the five (5) year time-of-travel zone for Group A water system wells, calculated in accordance with the Washington State Source Water Assessment Program.

b. Ten (10) year time-of-travel zones in wellhead protection areas are included as critical aquifer recharge when a well draws its water from an aquifer that is at or above sea level and is without an overlying protective impermeable layer.

c. Areas identified as regionally significant aquifer recharge areas and identified as such by the city are:

None are identified in Mount Vernon at this time. Future designations may occur.

2. Category II Critical Aquifer Recharge Areas. Category II critical aquifer recharge areas are areas that provide recharge to aquifers that are current or potentially will become potable water supplies and are vulnerable to contamination based on the type of land use activity. These include the following:

a. Highly Permeable Soils (Group A Hydrologic Soils). The general location and characteristics of Group A hydrologic soils in the city is given in the Soils Survey Skagit County by the U.S. Department of Agriculture, Natural Resources Conservation Service (NRCS). The soil survey information is available at the Department of Community Development.

b. Areas Above Shallow Principal Aquifers. Surface areas above shallow, principal aquifer(s) which are not separated from the underlying aquifers by an impermeable layer that provides adequate protections to preclude the proposed land use from contaminating the shallow aquifer(s) below, are considered aquifer recharge areas of concern

C. Development Standards:

1. Allowed Activities. The following activities are allowed in critical aquifer recharge areas and do not require submission of a hydrogeological assessment:

a. Construction of structures and improvements, including additions, resulting in less than 5 percent or 2,500 square feet (whichever is greater) total site impervious surface area that does not result in a change of use or increase the use of a hazardous substance.

b. Development and improvement of parks, recreation facilities, open space, or conservation areas resulting in less than 5 percent total site impervious surface area that do not increase the use of a hazardous substance.

Standards for development shall be in accordance with the provisions below and the requirements of other underlying city regulations.

c. On-site domestic septic systems releasing less than 14,500 gallons of effluent per day and that are limited to a maximum density of one system per one acre.

d. Residential Use of Pesticides and Nutrients. Application of household pesticides, herbicides, and fertilizers that do not exceed times and rates specified on the packaging.

e. Residential storage or use of petroleum and petroleum products.

f. Activities which have a potential contamination source below threshold amounts as set forth in applicable statues of the Revised Code of Washington or local regulations. The purpose of this clause is to allow for small-scale and residential activities thought to have no significant impacts to critical aquifer recharge areas.

2. Prohibited Activities. The following activities and uses are prohibited in Category I critical aquifer recharge areas:

a. Landfills, including hazardous or dangerous waste, municipal solid waste, special waste, and wood waste;

b. Underground Injection Wells. Wells which meet the requirements of Chapters 173-218 and 173-200 WAC with the exception of 5B22, 5D2, 5G30, 5W12, 5W32, 5R21, and 5S23;

c. Commercial mining and washing of metals, hard rock, sand and gravel;

d. Chemical wood preservation and/or treatment facilities;

e. Storage, processing, or disposal of radioactive substances;

f. Commercial activities that are not connected to an available sanitary sewer system;

g. Use or storage of pesticides listed as "state restricted use pesticides" by Chapter 16-228 WAC;

h. Oil and gas drilling as defined in WAC 332-12-450 and Chapter 173-218 WAC;

j. Underground storage of hazardous substances as regulated by Chapter 173-360 WAC;

j. Use, storage, treatment, or production of perchlorethylene (PCE), other than in closed-loop systems that do not involve any discharge of PCE;

k Petroleum refining, reprocessing, storage and petroleum-product pipelines;

l. Electroplating/metal finishing;

m. Activities that would significantly reduce the recharge to aquifers currently or potentially used as a potable water source; and

n. Activities that would significantly reduce the recharge to aquifers that are a source of significant base flow to a regulated stream.

D. Allowed Uses With Performance Standards:

1. General Requirements. Any activity not specifically exempted through MVMC 15.40.020(D) as allowed or prohibited may be permitted in a critical aquifer recharge area if all of the following criteria are met (a list of specific uses with a potential threat to ground water can be found in subsection (b) of this section.):

a. Hydrogeological Assessment.

i. For Category I aquifer recharge areas the applicant must show through a hydrogeological assessment that the proposed activity will not cause significant impact to aquifer quality or recharge. The hydrogeological assessment will be evaluated and treated as a special use review and be reviewed by the Department, the health district, affected tribes, and affected water purveyors. An incompatible activity can be denied by the Director.

ii. For Category II aquifer recharge areas a hydrogeological assessment may be required. The scope of the report shall be based on site-specific conditions. The hydrogeological assessment will be evaluated and treated as a special use review and be reviewed by the Department, the health district, affected tribes, and affected water purveyors. An incompatible activity can be denied by the Director. The need for additional information will be determined by the Department, the health district, and the affected water purveyor. Based on the report, controls, mitigation, and/or other requirements will be established as a prerequisite for the development proposal being approved.

b. The proposed activity must comply with the source water protection requirements and recommendations of the U.S. Environmental Protection Agency, Washington State Department of Health, Washington Department of Ecology, and the Skagit County Health District.

c. The applicant must explore low-impact development site design alternatives and implement them where economically feasible. Low-impact development techniques in the most current edition of the Puget Sound Action Team Low Impact Development Technical Guidance Manual for Puget Sound can include, but are not limited to:

i. Rainwater harvesting;

ii. Reverse slope sidewalks;

iii. Vegetated roofs;

iv. Bioretention areas (rain gardens); and

v. Pervious pavement.

2. Potential Threats to Ground Water. Specific uses with potential threats to ground water can include, but are not limited to the following. Uses meeting the listed performance standards may be allowed if the criteria of this section are met.

a. Anything that is not exempt per MVMC 15.40.020(D).

b. All storage tanks proposed to be located in a critical aquifer recharge area must comply with local building code requirements and must conform to the following requirements:

i. All new above-ground storage facilities proposed for use in the storage of hazardous substances or hazardous wastes shall be designed and constructed so as to:

(a) Not allow the release of a hazardous substance to the ground, ground waters, or surface waters;

(b) Have a primary containment area enclosing or underlying the tank or part thereof; and

(c) A secondary containment system either built into the tank structure or a dike system built outside the tank for all tanks.

c. Vehicle Repair and Servicing.

i. Vehicle repair and servicing must be conducted over impermeable pads and within a covered structure capable of withstanding normally expected weather conditions. Chemicals used in the process of vehicle repair and servicing must be stored in a manner that protects them from weather and provides containment should leaks occur.

ii. No dry wells shall be allowed in critical aquifer recharge areas on sites used for vehicle repair and servicing. Dry wells existing on the site prior to facility establishment must be abandoned using techniques approved by the State Department of Ecology prior to commencement of the proposed activity.

d. Water reuse projects for reclaimed water must be in accordance with the adopted water or sewer comprehensive plans that have been approved by the State Departments of Ecology and Health.

i. Use of reclaimed water for surface percolation must meet the ground water recharge criteria given in RCW 90.46.010(10) and 90.46.080(1). The State Department of Ecology may establish additional discharge limits in accordance with RCW 90.46.080(2).

ii. Direct injection must be in accordance with the standards developed by authority of RCW 90.46.042.

e. Automobile washers as defined in Chapter 173-216 WAC.

f. Chemical treatment storage and disposal facilities as defined in WAC 173-303-182.

g. Hazardous waste generators, including, but not limited to: boat repair shops, biological research facilities, dry cleaners, furniture stripping, motor vehicle service garages, photographic processing, printing and publishing shops, medical and dental facilities, etc., as defined in Chapter 173-303 WAC.

h. Junk yards and salvage yards as defined in Chapter 173-304 WAC, Best Management Practices to Prevent Stormwater Pollution at Vehicle Recycler Facilities (WDOE publication number 94-146).

i. On-site sewage systems (large scale) as defined in Chapter 173-240 WAC.

j. On-site sewage systems (less than fourteen thousand five hundred (14,500) gal/day) as defined in Chapter 246-272 WAC.

k. Pesticide storage and use as defined in Chapters 15.54 and 17.21 RCW.

l. Sawmills as defined in Chapters 173-303 and 173-304 WAC, WDOE publication number 95-53, Best Management Practices to Prevent Stormwater Pollution at Log Yards.

m. Solid waste handling and recycling facilities as defined in Chapter 173-304 WAC.

n. Wastewater application to land surface as defined in Chapters 173-216 and 173-200 WAC, and WDOE Land Application Guidelines, Best Management Practices for Irrigated Agriculture.

o. New impervious surface area exceeding 20,000 square feet.

p. Beneficial use of biosolids as defined in Chapter 173-308 WAC.

q. Golf courses, provided:

i. Fertilizer use is not above agronomic rates;

ii. Pesticides are managed and applied by properly licensed personnel, and use of all pesticides is approved by the affected water utility;

iii. The golf course allows for periodic monitoring by the Department or an affected water utility.

r. Noncommercial gravel and sand mining provided the extraction of materials remains no less than 10 feet above the level of the aquifer.

3. Affected Agency Review. The city will notify Skagit County Health District and affected water utilities and will request them to comment during the preliminary phases of the city's review process on all proposed projects defined in subsection (b) of this section.

4. Inspection. City personnel may inspect at reasonable times, upon presentation of credentials, as part of its wellhead protection program any activity that is known to manage or potentially manage hazardous materials.

E. Hydrogeologic Assessment: The assessment shall address the impact the proposed land use will have on both the quality and quantity of the water transmitted to the aquifer.

1. The assessment shall be submitted to the Department and shall address, at a minimum, the following criteria:

a. Surficial soil type and geologic setting;

b. Location and identification of wells within 1,000 feet of the site;

c. Location and identification of surface water bodies and springs within 1,000 feet of the site with recharge potential, unless geologic features in the basin make it clear that a larger area is hydraulically connected to any fish bearing stream in the affected basin;

d. Description of underlying aquifers and aquitards, including water level, gradients and flow direction;

e. Available surface water and ground water quality data;

f. Effects of the proposed development on water quality;

g. Sampling schedules required to assure water quality;

h. Discussion of the effects of the proposed development on the ground water resource;

i. Recommendations on appropriate BMPs (best management practices), 2005 Stormwater Manual for Western Washington or mitigation to assure no significant degradation of ground water quality; and

j. Other information as required by the Skagit County Health District.

k. The assessment shall also address the types of pesticides, herbicides and fertilizers that can safely be used for the care of landscaping proposed by the applicant.

2. The hydrogeologic assessment shall be prepared by a professional geologist/hydrologist or by a soil scientist with a strong background in geology (see definition of "Certified Professional" in MVMC 15.40.170(B)).

3. Applications for development or operations with underground storage of petroleum products will be processed using the appropriate procedure as specified in existing Mount Vernon ordinances.

4. Analysis for a specific parcel(s), using the criteria outlined below, will be employed to confirm if the soils present require a recharge area designation. Data collection will include, at a minimum, six soil logs to a depth of 10 feet (or to a depth f 4 feet below the lowest proposed excavation point whichever is greater) for each acre in the parcel(s) being evaluated. At least one well, 200 feet or greater in depth with an adequate drilling report, must be available within one mile. The associated data shall be analyzed and included in the hydrogeologic assessment to determine the presence of highly permeable soils with the recharge area designation.

15.40.070 Flood Hazard Regulations

All regulated activities in flood hazard areas shall comply with MVMC Chapter 15.36.

15.40.080 Geologic Hazard Area and Hillside Development Standards

A. Classification:

1. Erosion hazard areas: An area that contains one or more of the following characteristics:

a. Those areas containing soils that, according to the U.S. Natural Resource Conservation Service Survey, have severe to very severe erosion hazard potential; and/or

b. Those project areas that fall within any soil sloping greater than or equal to 30 percent; and/or

c. Those areas that may be considered to have an erosion hazard as a result of rapid stream incision or stream bank erosion.

2. Landslide hazard areas: An area that exhibits one or more of the following characteristics:

a. Contains or lies within 200 feet from slopes having the following characteristics: Gradients of 15 percent or greater intersecting geologic contacts with permeable sediments overlying low permeability sediment or bedrock and springs or ground water seepage are present; and/or

b. Contains or lies within 200 feet from any area having a 40 percent slope or steeper and with a vertical relief of 10 feet or more; and/or

c. Contains or lies within 200 feet from any areas of historic failure such as areas designated as quaternary earth slumps, earthflows, mudflows, lahars, debris flows, rock slides, landslides or other slope failures on maps or technical reports published by the U. S. Geological Survey such as topographic or geologic maps, or the Geology and Earth Resources Division of the Washington Department of Natural Resources, or other documents authorized by government agencies; and/or

d. Contains or lies within 200 feet from any areas potentially unstable as a result of rapid stream incision, stream bank erosion, and undercutting by wave action shall be addressed as a flood hazard consistent with this chapter; and/or

e. Areas that have shown movement (e.g. slides, rotational or mass failures, subsidence) during the Holocene epoch (i.e., the last 8,000 – 10,000 years) or which are underlain or covered by wastage debris of that epoch; and/or

f. Contains or lies within 200 feet from any slopes that are parallel or sub-parallel to planes of weakness (such as bedding planes, joint systems, and fault planes) in subsurface materials; and/or

g. Contains or lies within 200 feet from any slopes with a gradient greater than 80 percent and subject to rock fall during seismic shaking.

3. Seismic hazard areas: Seismic hazard areas shall include areas that are subject to severe risk of damage as a result of earthquake induced ground shaking, slope failure, settlement, soil liquefaction or surface faulting as follows:

a. Areas to have a potential for soil liquefaction and soil strength loss during ground shaking as identified on the City of Mount Vernon Soil Liquefaction Potential Map derived from Washington State Department of Natural Resources data or as identified by investigative maps or studies by the United States Geologic Survey.

b. Areas located on a Holocene fault line as indicated on investigative maps or described in studies by the United States Geologic Survey, Geology and Earth Resources Division of the Washington Department of Natural Resources, or other documents authorized by government agencies, or as identified in the field.

4. Volcanic hazard areas: Volcanic hazards areas include those lands identified as a volcanic hazard zone for Glacier Peak, Washington (USGS Open-File Report 95-499); or in a volcanic hazard area of Mount Baker, Washington (USGS Open-File Report 95-498).

5. Alluvial fan hazard areas: Areas within or 200 feet from an alluvial fan as designated on the Skagit County Alluvial Fan Study Orthophoto Maps. An alluvial fan is an accumulation of sediment deposited by a stream where it issues from steep, confined hillslopes onto a floodplain or valley floor. The sediment mass includes rock, mud, woody debris, and other accumulations. The depositional mechanism is the decrease in gradient that causes the material to stop its downhill course. Repeated debris flows tend to obstruct the channel, forcing the material to find a new path of least resistance.

B. Geologic Hazard Performance Standards:

1. General:

a. Geologic hazard reports shall demonstrate all of the following criteria are met:

i. The proposal will not increase the threat of the geological hazard to adjacent properties beyond pre-development conditions; and

ii. The proposal will not adversely impact other critical areas; and

iii. The development can be safely accommodated on the site.

b. Upon review of geotechnical studies, the Director may apply conditions of approval to mitigate adverse environmental impacts and to meet the criteria in 2.a.i above. Such conditions may include, but are not limited to, construction techniques, design, drainage, project size/configuration, or seasonal constraints on development. Additional possible conditions may be listed under the performance standards for each hazard type.

2. Erosion and Landslide Hazard Areas: Regulated development activities shall be subject to the following:

a. A temporary erosion and sedimentation control plan prepared in accordance with the BMPs set forth in the Washington State Department of Ecology 2005 Stormwater Manual for Western Washington Volume II Chapter 4.

b. A drainage plan for the collection, transport, treatment, discharge and/or recycle of water in accordance with the requirements of the Mount Vernon storm water regulations in accordance with the BMPs set forth in the Washington State Department of Ecology 2005 Stormwater Manual for Western Washington Volume II Chapter 4.

c. All proposals involving excavations and placement of fills shall be subject to structural review under the appropriate provisions as found in the currently adopted Building Code of Mount Vernon.

d. All infiltration systems, such as storm water detention and retention facilities, and curtain drains utilizing buried pipe or French drain, are prohibited in erosion and landslide hazard areas and their buffers unless a site assessment report indicates such facilities or systems will not affect slope stability and the systems are designed by a licensed civil engineer. The engineer shall also certify that the system and/or facilities are installed as designed.

e. Vegetation Removal and Replanting. Removal of vegetation shall be minimized in erosion and landslide hazard areas. Any replanting that occurs shall consist of trees, shrubs, and ground cover that meets the objectives of erosion prevention and site stabilization, does not require permanent irrigation for long-term survival, and, if the removal and replanting are occurring inside a stream or wetland buffer, the plantings are suitable for that critical area and buffer functions.

f. Additional Requirements – Landslide Hazard Areas:

i. Surface drainage shall not be directed across the face of a landslide hazard (including bluffs or ravines). If drainage must be discharged from the hazard area into adjacent waters, it shall be collected above the hazard and directed to the water by tight line drain and provided with an energy dissipating device at the point of discharge.

ii. A minimum buffer with a width of 50 feet shall be established from the top, toe and all edges of all landslide hazardous areas. Existing native vegetation shall be maintained in accordance with mitigation recommendations within the buffer area. The buffer may be reduced to a minimum of 10 feet when an applicant demonstrates to the Director that the reduction will adequately protect the proposed development, adjacent developments and uses and the subject critical area. The buffer may be increased by the Director when determined necessary to prevent risk of damage to proposed and existing development. Normal non-destructive pruning and trimming of vegetation for maintenance purposes; or thinning of limbs of individual trees to provide a view corridor, shall not be subject to these buffer requirements.

3. Seismic hazard areas: Structural development proposals shall meet all applicable provisions of the Building Code as adopted by the city. The Director shall evaluate the geologic hazard area report and condition permit approvals to minimize the risk on both the subject property and affected adjacent properties.

4.Volcanic hazard areas:

a. Critical Facilities: Critical facilities on sites containing areas susceptible to inundation due to volcanic hazards shall require an evacuation and emergency management plan. The applicant for critical facilities shall evaluate the risk of inundation or flooding resulting from mudflows originating on Mount Baker in a geotechnical report, and identify any engineering or other mitigation measures as appropriate. Mitigation plans may be required. The geologic hazard report shall be subject to third party review consistent with MVMC 15.40.040.

b. Other: Meet the requirements of the city's flood hazard regulations in MVMC 15.36.

5. Alluvial fan hazard areas: Based upon the results of the geologic hazard report and third party review, the Director shall require conditions of approval for developments on sites which include or are affected by alluvial fan hazards. Conditions may include, but are not limited to vegetation enhancement, slope stabilization, buffer zones, or other requirements.

C. Hillside Development Standards. While slopes of less than 40 percent are not defined by this chapter as environmentally sensitive, improper development or construction on such slopes can cause erosion, flooding, property damage, and damage to environmentally sensitive areas regulated by this chapter. Development on hillsides with slopes of 15 percent or greater shall comply with the following requirements unless specifically exempt by another provision of this chapter.

1. Submittal Requirements. Proposals that include clearing, grading, filling, excavation, construction, paving, or removal of vegetation, on slopes between 15 percent and 39.99 percent are subject to the following:

a. Preparation of a geotechnical report prepared by a licensed professional engineer and that contains a description of how the proposed development and its associated grading plan will or will not impact each of the following on the subject property and adjoining properties:

i. Slope stability, erosion, and landslide hazards,

ii. Drainage, surface and subsurface hydrology, and water quality, and

iii. Existing vegetation as it relates to wetlands, steep slopes, soil stability, and natural habitat value.

b. Recommended methods for mitigating identified impacts and a description of how these mitigation measures may impact adjacent properties.

2. Conditions: Based upon the results of the geotechnical report, the Director may require conditions of approval including, but not limited to, vegetation enhancement, and slope stabilization, restriction on clearing area or time of year, or other requirements.

15.40.090 Fish and Wildlife Habitat Conservation Areas

A. Description and Purpose:

The intent of these regulations is to protect functions and values for streams, riparian habitat, resident and anadromous fish, and wildlife conservation areas and to provide protection and/or enhancement for anadromous fish. This section of the City Code contains standards, guidelines, criteria and requirements intended to identify, evaluate and mitigate potential impacts to habitat conservation areas within the city and to enhance degraded habitat and streams in appropriate cases. In such circumstances, impacts resulting from regulated activities may be minimized, rectified, reduced and/or compensated for, consistent with this chapter. The regulations are to manage land so as to maintain fish and wildlife species in suitable habitats within their natural geographic distribution so that isolated subpopulations are not created and achieve no net loss in fish or wildlife habitat or stream functions. Interpretations of this section shall be made to conform to the requirements of WAC 365-190-080.

B. Classification and Designation of Fish and Wildlife Habitat Conservation Areas:

Classification and designation of fish and wildlife habitat conservation areas is an ongoing process; while not all of the following critical habitat conservation areas are known to exist in the city, their designation here allows for future categorization for protection. The following categories shall be used for relevant development standards of section (C) below.

1. Streams and Shorelines: All streams and shorelines which meet the criteria for Type S, F, Np or Ns waters as set forth in WAC 222-16-030 of the Department of Natural Resources Water Typing System. The city classification system shall mirror the definitions as provided in WAC 222-16-030.

2. Shorelines, Lakes 20 Acres and Greater in Surface Area: Those shorelines and lakes defined as shorelines of the state in the Shoreline Management Act of 1971 and the Mount Vernon Shoreline Master Program as amended. Shorelines include: Type S waters as set forth in WAC 222-16-030 (DNR Water Typing System) as amended.

3. Lakes Less than 20 Acres in Surface Area: Those lakes which meet the criteria for Type F, Np, and Ns waters as set forth in WAC 222-16-030 as amended. This includes lakes and ponds less than 20 acres in surface area and their submerged aquatic beds, lakes, and ponds planted with game fish by a governmental or tribal authority.

4. Class I Fish and Wildlife Conservation Areas, other than streams and shorelines:

a. Habitats and species recognized by federal or state agencies for federal and/or state-listed endangered, threatened and sensitive species that have primary association documented in maps or databases available to the city and that, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term.

b. Areas targeted for preservation by the federal, state, and/or local government which provide fish and wildlife habitat benefits, such as the shared strategy process for Puget Sound; and areas of primary association for anadromous fish and important waterfowl areas identified by the U.S. Fish and Wildlife Service.

c. Areas that contain habitats and species of local importance. These areas are identified by the city, including but not limited to those habitats and species that, due to their population status or sensitivity to habitat manipulation, warrant protection. Habitats may include a seasonal range

or habitat element with which a species has a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term. Habitats of local importance can include attributes such as comparatively high wildlife density, high wildlife species richness, significant wildlife breeding habitat, seasonal ranges or movement corridors of limited availability and/or high vulnerability. These habitats may include cliffs, meadows, old-growth/mature forests, snag-rich areas, and urban natural open spaces.

5. Class II Fish and Wildlife Conservation Areas, other than streams and shorelines:

a. Habitats for state-listed candidate and monitored species documented in maps or databases available to the city, which if altered, may reduce the likelihood that the species will maintain and reproduce over the long term.

b. Habitats that have been identified through maps, databases, reports, or studies that include attributes such as comparatively high wildlife density, high wildlife species richness, significant wildlife breeding habitat, seasonal ranges or movement corridors of limited availability and/or high vulnerability. These habitats may include caves, cliffs, meadows, old-growth/mature forests, snag-rich areas, talus slopes, and urban natural open space.

6. Habitats and Species of Local Importance: The city should accept and consider nominations for habitat areas and species to be designated as locally important.

a. Habitats and species to be designated shall exhibit the following characteristics:

i. Local populations of native species are in danger of extirpation based on existing trends;

ii. Local populations of native species that are likely to become endangered; or

iii. Local populations of native species that are vulnerable or declining.

b. The species or habitat has recreation, commercial, game, tribal, or other special value.

c. Long-term persistence of a species locally is dependent on the protection, maintenance, and/or restoration of the nominated habitat.

d. Protection by other county, state, or federal policies, laws, regulations, or nonregulatory tools is not adequate to prevent degradation of the species or habitat in the city.

e. Without protection, there is likelihood that the species or habitat will be diminished locally over the long term.

f. Areas nominated to protect a particular habitat or species must represent either high-quality native habitat or habitat that has a high potential to recover to a suitable condition and which is of limited availability, highly vulnerable to alteration, or provides landscape connectivity which contributes to the integrity of the surrounding landscape.

g. Habitats and species may be nominated for designation by any person in accordance with the process in Appendix A.

C. Development Standards:

For the purposes of this title, a designated fish and wildlife habitat conservation area with its buffer is a critical area. Those regulated uses identified below within designated fish and wildlife habitat conservation areas shall comply with the performance standards outlined in this chapter. A habitat management plan (HMP) is a site investigation to evaluate the potential presence or absence of a regulated fish or wildlife species or habitat affecting a subject property and proposed development.

1. Endangered, Threatened, and Sensitive Species:

a. No development shall be allowed within a habitat conservation area or buffer with which state or federally endangered, threatened, or sensitive species have a primary association, except that which is provided for by a habitat management plan (HMP) consistent with a habitat report identifying BMPs consistent with management guidelines recommended by state and

federal agencies where present and otherwise consistent with best available science as established in the scientific literature for similar circumstances. Such plans shall identify the source of the recommendations and the key metrics by which success of the plan is to be measured and enforced.

b. Whenever activities are proposed adjacent to a habitat conservation area with which state or federally endangered, threatened, or sensitive species have a primary association, such area shall be protected through the application of protection measures in accordance with an HMP prepared by a certified professional and approved by the city. Approval for alteration of land adjacent to the habitat conservation area or its buffer shall not occur prior to consultation with the Washington Department of Fish and Wildlife for animal species, the Washington State Department of Natural Resources for plant species, and other appropriate federal or state agencies.

c. Bald eagle habitat shall be protected pursuant to the Washington State Bald Eagle Protection Rules (WAC 232-12-292). Whenever activities are proposed adjacent to a verified nest, territory, or communal roost and, activities that are adjacent to bald eagle sites within 800 feet or within one-half mile (2,640 feet) and in a shoreline foraging area shall require an approved HMP. The city shall verify the location of eagle management areas for each proposed activity. Approval of the activity shall not occur prior to approval of the HMP by the Washington Department of Fish and Wildlife.

2. Anadromous Fish:

a. All activities, uses, and alterations proposed to be located in water bodies used by anadromous fish or in areas that affect such water bodies shall give special consideration to the preservation and enhancement of anadromous fish habitat, including, but not limited to, adhering to the following standards:

i. Activities shall be timed to occur only during the allowable work window as designated by the Washington Department of Fish and Wildlife for the applicable species;

ii. If alternative alignment or location for the activity is not feasible, then activities shall be designed so that it will replace any affected functions and values with equivalent systems to avoid overall degradation to the functions and values of the fish habitat or other critical areas;

iii. Shoreline erosion control measures shall be designed to use bioengineering methods or soft armoring techniques where such approaches are reasonably effective, according to an approved critical area report; and

iv. Any impacts to the functions or values of the habitat conservation area are mitigated in accordance with an approved habitat management plan.

b. Structures that prevent the migration of salmonids shall not be allowed in the portion of water bodies currently or historically used by anadromous fish. Fish bypass facilities shall be provided that allow the upstream or downstream migration of adult fish and shall prevent fry and juveniles migrating downstream from being trapped or harmed, or otherwise adversely affect the overall lifecycle of such fish.

c. Fills, when authorized by the Shoreline Master Program, shall not adversely impact anadromous fish or their habitat or shall mitigate any unavoidable impacts and shall only be allowed for a water-dependent use.

3. Wetland Habitats: All proposed activities within or adjacent to habitat conservation areas containing wetlands shall conform to the wetland development performance standards set forth in this chapter. If nonwetlands habitat and wetlands are present at the same location, the provisions of this chapter or the wetlands chapter, whichever provides greater protection to the habitat, apply. Where a wetland is divided by a right of way or other improvement, but functions as a single system, the system shall be scored as a whole and not in pieces.

4. Buffers and Associated Building Setback Areas: The distance shall be measured from the ordinary high water mark (OHWM) or from the top of the bank where the OHWM cannot be identified. Buffers shall remain undisturbed natural beach or vegetation areas except where the buffer can be enhanced to improve its functional attributes, as approved by the Director. Buffers shall be maintained along the perimeter of fish and wildlife habitat conservation areas, as listed below in Table A of this section. Refuse shall not be placed in buffers. Alteration of buffer areas and building setbacks may be allowed for water-dependent and water-related activities and for other property development authorized by the Shoreline Master Program, an HMP, reasonable use exceptions, general exemptions, standards for existing (nonconforming) development, and variances in general exemptions; provided, however, in each instance mitigation shall be required to replace affected functions and values within the affected zone.

15.40.090 Table A, Water Type Buffer Standards			
Water Types	Attributes	Minimum Building Setback	Buffer Width Standard
S Freshwater	Freshwater Shorelines of the State	15 feet beyond buffer	175 feet
F	Fish Habitat Waters	15 feet beyond buffer	150 feet
Np	Year-Round, Nonfish Habitat	15 feet beyond buffer	50 feet
Ns	Seasonal, Nonfish Habitat	15 feet beyond buffer	35 feet

a. Buffers. Where existing buffer area plantings provide minimal vegetative cover and cannot provide the city's water quality standards or habitat functions (per the requirements of the Department of Ecology and Fish and Wildlife), buffer enhancement shall be required. Where buffer enhancement is required, a plan shall be prepared that includes plant densities that are not less than 3 feet on center for shrubs and 8 feet on center for trees. Monitoring and maintenance of plants shall be required in accordance with section (F) below, Monitoring and Contingency Plan. Existing buffer vegetation is considered "inadequate" and will require enhancement through additional native plantings and removal of nonnative plants when:

i. Nonnative or invasive plant species provide the dominant cover;

ii. Vegetation is lacking due to disturbance and marine, stream, or habitat resources could be adversely affected; or

iii. Enhancement plantings in the buffer could significantly improve buffer functions.

iv. An increase in buffer width onsite or restoration of existing buffer required under this section shall be directed to modifications reasonably necessary to mitigate impacts created by the proposed development and roughly proportional to the scope and scale of the impacts created by the proposed development.

b. "Minimum building setback" is the required horizontal distance between the finished exterior wall of a structure and the edge of the critical area of the lot on which the structure is located. All portions of a structure must be located away from the critical area edge a distance equal to or greater than the minimum setback. Uses not requiring a permit defined in the city Building Code may be permitted in the setback if the Director determines that such intrusions will not adversely impact the fish and wildlife habitat conservation area, or prescribes a plan to replace affected functions and values within the affected area.

c. Stream Buffer Measurement. Streams shall be classified according to the stream type system as provided in WAC 222-16-031, Interim water typing system. Stream buffer areas are defined by these classifications, as shown in Table A of this section. Buffers shall be measured from the ordinary high water mark (OHWM) or from the top of the bank where the OHWM cannot be identified. The buffer width shall be increased to include streamside wetlands which provide overflow storage for storm waters, feed water back to the stream during low flows or provide

shelter and food for fish. In braided channels, the OHWM or top of bank shall be defined so as to include the entire stream feature.

d. Buffer Averaging. Buffer widths may be modified by averaging buffer widths as long as the total area contained within the buffer after averaging is no less than the required buffer prior to averaging, and as set forth below. A buffer enhancement plan shall be required for any request for buffer averaging. The enhancement plan shall be similar to a mitigation plan, and include provisions for mitigation monitoring and contingency plans. Buffer width averaging shall be allowed only where the applicant demonstrates through a report prepared by a qualified biologist or habitat specialist with five years experience that:

i. Buffer averaging is necessary to avoid a hardship caused by circumstances to the property;

ii. The habitat contains variations in sensitivity due to existing physical characteristics, or the buffer varies in characteristics and it would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;

iii. Lower intensity land uses would be located adjacent to areas where the buffer width is reduced;

iv. The widest portion of the buffer shall be the area where the habitat is most sensitive;

v. Buffer width averaging will not adversely impact fish and wildlife habitat conservation areas;

vi. The buffer width may be reduced by 35 percent of the standard buffer, but not less than 35 feet unless provided for by a habitat management plan.

e. Buffer Reduction. Buffers and associated building setbacks may be reduced where the applicant demonstrates through an approved HMP relying on best available science and prepared by a qualified specialist with five years experience that through buffer enhancement the smaller buffer would provide equal or better protection than the larger buffer. Enhancement techniques can include, but are not limited to:

i. Planting of native trees or shrubs, increasing the diversity of plant cover types, replacing exotic species with native species, or reestablishing fish areas adjacent to a marine shoreline or stream where one currently does not exist will result in improved function of the fish habitat;

ii. Fish barrier removal to restore accessibility to resident or anadromous fish;

iii. Fish habitat enhancement using log structures incorporated as part of a fish habitat enhancement plan;

iv. Stream and/or retention/detention pond improvements:

(a) Removal or modification of existing stream culverts (such as at road crossings) to improve fish passage and flow capabilities, or

(b) Upgrade of retention/detention facilities or other drainage facilities beyond required levels to provide a more naturalized habitat;

v. Removal of existing bulkheads to improve fish spawning and habitat areas;

vi. Daylighting a stream that was previously culverted or piped, or daylighting box culverts or trestles.

f. Storm Water Management Facilities. Storm water management facilities, limited to storm water dispersion outfalls and bioswales, may be allowed within the outer 25 percent of the buffer; provided, that:

i. No other location is feasible; and

ii. The location of such facilities will not degrade the functions or values of the stream and/or habitat area shown through an approved HMP.

g. Low-Impact Development (LID) Facilities. LID facilities, may be allowed within stream buffers; provided, that:

i. No other location is feasible; and

ii. The location of such facilities will not degrade the functions or values of the stream and/or habitat area shown through an approved HMP.

h. Habitat Conservation Area Buffers. Habitat conservation area buffers shall be shown on the development site plans or final plat maps along with the notation requirements identified in this chapter.

i. If an existing property has a previously delineated and approved fish and wildlife habitat conservation area and associated buffer by the city, the approved conservation area and buffer may remain in effect. Redevelopment, and/or additions outside of the existing footprint shall be subject to the previously approved buffer; however, a buffer enhancement plan may be required in accordance if the habitat buffer area has become degraded or is currently not functioning or if the habitat area and/or buffer may be negatively affected by proposed new development. If, according to the buffer enhancement plan, additional buffer mitigation is not sufficient to protect the habitat, the city may require larger buffers where it is necessary to protect habitat functions based on site-specific characteristics.

5. Class I Fish and Wildlife Conservation Areas: All development as described within this chapter or within 200 feet of designated Class I wildlife conservation areas shall adhere to the following standards:

a. All sites with known locations of Class I fish and wildlife conservation areas or sites within 200 feet to known locations of Class I fish and wildlife conservation areas will require, for all development permits, the submittal and approval of a habitat management plan (HMP) as specified in section (E) below. In the case of bald eagles, an approved bald eagle management plan by the Washington State Department of Fish and Wildlife, meeting the requirements and guidelines of the bald eagle protection rules (WAC 232-12-292), as now or hereafter amended shall satisfy the requirements for an HMP. The requirement for an HMP shall be determined during the SEPA/critical areas review on the project. No project falling within a Class I fish and wildlife habitat conservation area shall be exempt from SEPA review.

b. All new development within 200 feet of habitat elements with which Class I fish and wildlife have a critical habitat may require the submittal of an HMP as specified in section (B) below. The requirement for an HMP shall be determined during the SEPA/critical areas review on the project.

15.40.090 Table B, Wildlife Habitat Conservation Areas	
Class I	All developments within 200 ft. of a designated Class I wildlife habitat conservation area shall have buffer widths determined by a mandatory habitat management plan.
Class II	All development within a Class II wildlife habitat conservation area shall have the buffer widths be determined by the SEPA/critical area review on the project and may require a habitat management plan.

6. Class II Fish and Wildlife Conservation Area: All new development within Class II fish and wildlife conservation areas may require the submittal of an HMP if the Director determines that the activity is within a critical distance of a protected species for an activity which the species has a primary association. An HMP shall consider measures to retain and protect the wildlife habitat and shall consider effects of land use intensity, buffers, setbacks, impervious surfaces, erosion control and retention of native vegetation. The requirement for an HMP shall be determined during the SEPA/critical areas review on the project. No project falling within a Class I fish and wildlife habitat conservation area shall be exempt from SEPA review.

7. Stream Crossings: Any private or public road expansion or new construction which is allowed and must cross streams classified within this chapter shall comply with the following minimum development standards:

a. Bridges or bottomless culverts shall be required for all fish-bearing streams. Other alternatives may be allowed upon submittal of a habitat management plan which demonstrates that other alternatives would not result in significant impacts to the fish and wildlife conservation area, as determined appropriate through the Washington State Department of Fish and Wildlife, hydraulics project approval process. The plan must demonstrate that salmon habitat will be replaced on a 1:1 ratio;

b. Crossings shall not occur in salmonid spawning areas unless no other feasible crossing site exists. For new development proposals, if existing crossings are determined to adversely impact salmon spawning or passage areas, new or upgraded crossings shall be located as determined necessary through coordination with the Washington State Department of Fish and Wildlife;

c. Bridge piers or abutments shall not be placed in either the floodway or between the ordinary, high water marks unless no other feasible alternative placement exists;

d. Crossings shall not diminish flood carrying capacity and shall follow FEMA/WDFW guidelines, whichever are more protective of flood carrying capacity.

e. Crossings shall serve multiple properties whenever possible; and

f. Where there is no reasonable alternative to providing a conventional culvert, the culvert shall be the minimum length necessary to accommodate the permitted activity (guidance for these projects can be found in the Washington Department of Fish and Wildlife "Fish Passage Design at Road Culverts" design manual 1999, and the National Marine Fisheries Service "Guidelines for Salmonid Passage at Stream Crossings" 2000).

8. Stream Relocations: Stream relocations for the purpose of flood protection and/or fisheries restoration shall only be permitted when adhering to the following minimum performance standards and when consistent with Washington State Department of Fish and Wildlife hydraulic project approval:

a. The channel, bank and buffer areas should be replanted with native vegetation in undisturbed riparian condition;

b. For those shorelands and waters designated as frequently flooded areas, a professional engineer licensed in the State of Washington shall provide information demonstrating that the equivalent base flood storage volume and function will be maintained; and

c. Relocated stream channels shall be designed to meet or exceed the functions and values of the stream to be relocated.

9. Stream Relocations-Other: In circumstances other than addressed in subsection 8 above, stream relocation may only be permitted if associated with:

a. Criteria: Stream relocation may only be permitted if associated with:

i. A public flood hazard reduction approved by appropriate state and/or federal agencies; or

ii. Fish and other faunal species restoration/habitat enhancement projects approved by appropriate state and/or federal agencies; or

iii. Expansion of public road or other public facility improvements where no feasible alternative exists; or

iv. Where such relocation is proposed to provide protective buffer systems from existing development or constructed features.

b. Conditions: The following conditions also apply to any stream relocation proposal meeting one or more of the above criteria:

i. Relocated stream channels and their associated floodplains shall be designed to meet or exceed instream and floodplain/riparian habitat functions and values of the stream to be relocated.

ii. Flood capacity of the channel shall not be diminished;

iii. Floodplain/Riparian buffer areas shall be replanted with native vegetation;

iv. Buffer widths shall be based upon the new stream location, provided that the buffer widths may be averaged or reduced as described in subsections (4)(d) and (4)(e) above. Where minimum required buffer widths are not feasible for stream relocation proposals that are the result of activities pursuant to criteria a.i and a.ii above, other equivalent on- or off-site compensation to achieve no net loss of riparian function is provided;

v. When Type Np or Ns streams are proposed for relocation due to expansions of public roads or other public facility improvements per subsection (a)(iii) above, the buffer area adjacent to the relocated stream shall not be less than the width prior to the relocation. The provided buffer adjacent to the relocated stream shall be restored, enhanced, or improved to provide appropriate functioning given the type and condition of the stream; or if there is no buffer currently, other equivalent on- or off-site compensation to achieve no net loss of floodplain/riparian functioning is provided.

10. Pesticides, Fertilizers and Herbicides: No pesticides, herbicides or fertilizers may be used in fish and wildlife conservation areas or their buffers, except those approved by the EPA and approved under a DOE water quality modification permit for use in fish and wildlife habitat conservation area environments. Where approved, herbicides must be applied by a licensed applicator in accordance with the safe application practices on the label.

11. Land Divisions and Land User Permits: All proposed divisions of land and land uses (subdivisions, short subdivisions, residential cluster developments, conditional use permits, site plan reviews, and binding site plans) which include fish and wildlife habitat conservation areas shall comply with the following procedures and development standards:

a. The open water area of lakes, streams, and tidal lands shall not be permitted for use in calculating minimum lot area;

b. Land division approvals shall be conditioned so that all required buffers are dedicated as open space tracts or an easement or covenant encumbering the buffer. Such dedication, easement or covenant shall be recorded together with the land division and represented on the final plat, short plat or binding site plan;

c. In order to avoid the creation of nonconforming lots, each new lot shall contain at least one building site that meets the requirements of this chapter, including buffer requirements for habitat conservation areas. This site must also have access and a sewage disposal system location that are suitable for development and do not adversely impact the fish and wildlife conservation area;

d. After preliminary approval and prior to final land division approval, the Director may require the common boundary between a required buffer and the adjacent lands be identified using permanent signs. In lieu of signs, alternative methods of buffer identification may be approved when such methods are determined by the Director to provide adequate protection to the aquatic buffer.

12. Trails and Trail-Related Facilities: Construction of public and private trails and trail-related facilities, such as benches, interpretive centers, and viewing platforms, may be allowed in fish and wildlife habitat conservation areas or their buffers outside of the initial 50 feet pursuant to the following standards:

a. Trails and related facilities shall, to the extent feasible, be placed on existing road grades, utility corridors, or other such previously disturbed areas;

b. Trails and related facilities shall be planned to minimize removal of trees, shrubs, snags and important wildlife habitat;

c. Viewing platforms, interpretive centers, benches and limited access to focused water access areas shall be designed and located to minimize disturbance of wildlife habitat and/or critical characteristics of the affected conservation area;

d. Trails, in general, shall be set back from streams so that there will be no or minimal impact to the stream from trail use or maintenance. Trails shall be constructed with pervious surfaces when feasible;

e. Trails shall be generally limited to pedestrian use unless other more intensive uses, such as bike or horse trails, have been specifically allowed and mitigation has been provided. Trail width shall not exceed 5 feet unless there is demonstrated need, subject to review and approval by the Director. Trails shall be constructed with pervious materials unless otherwise approved by the Director;

f. Trails shall not be allowed to fully enclose a habitat area or buffer; and

g. The Director may require closure of trails during critical spawning, migration or breeding time periods of the species present.

13. Utilities: Placement of utilities within designated fish and wildlife habitat conservation areas may be allowed pursuant to the following standards:

a. Utilities maintenance activities involving no material change in size or function shall be allowed within designated fish and wildlife habitat conservation areas, subject to best management practices;

b. Construction of utilities may be permitted in fish and wildlife habitat conservation areas or their buffers, only when no feasible or reasonable alternative location is available and the utility corridor meets the requirements for installation, replacement of vegetation and maintenance outlined below, and as required in the filing and approval of an HMP which may be required by this chapter;

c. Construction of sewer lines may be permitted in fish and wildlife habitat conservation areas or their buffers when the applicant demonstrates it is necessary to meet state and/or local health code requirements, there are no other feasible alternatives available, and construction meets the requirements of this section. Joint use of the sewer utility corridor by other utilities may be allowed;

d. New utility corridors shall not be allowed in fish and wildlife habitat conservation areas with known locations of federal or state-listed endangered, threatened or sensitive species, heron rookeries or nesting sites of raptors which are listed as state candidate species except in those circumstances where an approved HMP indicates that the utility corridor will not significantly impact the conservation area;

e. New utility corridor construction and maintenance shall protect the environment of fish and wildlife habitat conservation areas and their buffers by the following:

i. New utility facilities, improvements, or upgrades to existing utility facilities should take place within existing improved rights-of-way or existing impervious surfaces so that they do not increase the amount of impervious surfaces within the habitat area;

ii. New utility corridors shall be aligned when possible to avoid cutting or root damage to trees greater than 12 inches in diameter at breast height (4-1/2) feet measured on the uphill side;

iii. New utility corridors shall be revegetated with appropriate native or equivalent vegetation at not less than preconstruction vegetation densities or greater, immediately upon completion of construction or as soon thereafter as possible due to seasonal growing constraints. The utility shall ensure that such vegetation survives;

iv. Any additional corridor access for maintenance shall be provided wherever possible at specific points rather than by parallel roads. If parallel roads are necessary, they shall be of a minimum width but no greater than 15 feet and shall be contiguous to the location of the utility corridor on the side away from the conservation area.

f. Utility corridor maintenance shall include the following measures to protect the environment of regulated fish and wildlife habitat conservation areas:

i. Utility towers should be painted with brush, pad or roller and should not be sandblasted or spray-painted, nor should lead-based paints be used;

ii. Pesticides, Fertilizers and Herbicides. No pesticides or fertilizers may be used in fish and wildlife conservation areas or their buffers, except those herbicides approved by a licensed applicator in accordance with the safe application practices on the label.

14. Bank Stabilization: A stream channel and bank may be stabilized when naturally occurring earth movement threatens existing structures (defined as requiring a building permit pursuant to the applicable building code), public improvements, unique natural resources, public health, safety or welfare, or the only feasible access to property, and, in the case of streams and marine shorelines, when such stabilization results in maintenance of fish and wildlife habitat, flood control and improved water quality. Where bank stabilization is determined to be necessary, bioengineering or other nonstructural methods should be the first option for protection. Bulkheads and retaining walls may only be utilized as an engineering solution where it can be demonstrated that an existing residential structure cannot be safely maintained or set back without such measures, and that the resulting retaining wall is the minimum length necessary to provide a stable building area for the structure. A variance pursuant to this chapter must be obtained in all other cases. The Director may require that bank stabilization be designed by a professional engineer and geologist licensed in the State of Washington with demonstrated expertise in hydraulic actions of shorelines. Bank stabilization projects may also require a city grading permit and hydraulic project approval from the Washington Department of Fish and Wildlife. Nonstructural marine shoreline and stream bank protective techniques are preferred to bulkheads or other types of marine shoreline and stream bank armoring. Nonstructural techniques include but are not limited to vegetation plantings and bioengineering. Guidance for these projects can be found in the Washington Department of Fish and Wildlife's "Integrated Streambank Protection Guidelines Manual" for determining when, why, where, and what projects need to be completed to protect an eroding bank. Federal Section 10 and/or Section 404 permits from the U.S. Army Corps of Engineers may also provide specific limitations and conditions that must be followed.

15. Fencing and Signs: Prior to approval or issuance of permits for land divisions and new development, the Director may require the common boundary between a required buffer and the adjacent lands be identified using fencing or permanent signs. In lieu of fencing or signs, alternative methods of buffer identification may be approved when such methods are determined by the Director to provide adequate protection to the buffer.

16. Road/Street Repair and Construction: Any private or public road or street expansion or construction which is allowed in a fish and wildlife habitat conservation area or its buffer shall comply with the following minimum development standards:

a. No other reasonable or feasible alternative exists and the road or street crossing serves multiple properties whenever possible;

b. Expansion or construction of any private or public road shall only be allowed when adverse impacts cannot be avoided;

c. Public and private roads should provide for other purposes, such as utility crossings, pedestrian or bicycle easements, viewing points, etc.;

d. The road or street construction is the minimum necessary, as required by the Department of Public Works, and shall comply with the Department of Public Works and Utilities standards; and

e. Construction time limits shall be determined in consultation with the Washington Department of Fish and Wildlife in order to ensure habitat protection.

17. Other Allowed Uses in Fish and Wildlife Conservation Areas: Other activities may be allowed using the standard for a Category II wetland buffer.

D. Special Reports:

Habitat Management Plan Requirements:

1. General: If the city determines that impacts to habitats may occur as a result of a development project, a habitat management plan (HMP) shall be required. The applicant may choose to complete an HMP for a site-specific analysis to better determine the impact to habitat and to determine the appropriate buffer width and associated building setbacks for their project based on the site-specific analysis. The preparation and submission of this report is the responsibility of the applicant. The report shall rely on best available science as defined in WAC 365-195-900 through 365-195-925 and shall be prepared by a certified professional who is a biologist with five (5) years of experience preparing reports for the relevant type of habitat. The city may retain a qualified consultant at the applicant's expense to review and confirm the applicant's reports, studies and plans. The HMP shall clearly demonstrate that greater protection of the functions and values of critical areas can be achieved through the HMP than could be achieved through providing the prescribed habitat buffers and building setbacks. An applicant may propose to implement an HMP as a means to protect habitat buffers associated with streams and/or fish and wildlife conservation areas. Approval for an HMP shall not occur prior to the consultation with the appropriate federal or state agencies.

2. Intent: HMPs are primarily intended as a means to restore or improve buffers that have been degraded by past activity, and should preserve, and not reduce, existing high-quality habitat buffers. While not primarily intended as a means to reduce buffers, the HMP may propose a reduction of the habitat buffer width where it is shown that the HMP will comply with the other requirements of this section.

3. Effect of Buffers: An HMP shall provide habitat functions and values that are greater than would be provided by the prescribed habitat buffers. When habitat buffers are a component of an HMP, they shall be at least the minimum size necessary to accomplish the objectives of the HMP. The HMP may propose, but the city shall not require, a habitat buffer containing a greater area than is required by the prescribed habitat buffer.

4. Impact Mitigation: The HMP shall encompass an area large enough to provide mitigation for buffer reduction below the standard required buffers, and shall identify how the development impacts resulting from the proposed project will be mitigated as defined in section (E) below. The developer of the plan shall use the best available science in all facets of the analyses. The Washington Department of Fish and Wildlife priority habitat and species management recommendations, and/or bald eagle protection rules outlined in WAC 232-12-292, as amended, may serve as guidance for this report.

5. The assessment of habitats for the site and project shall at a minimum include the following information:

a. A map prepared at an easily readable scale, showing:

i. The location of the proposed development site;

ii. Property boundaries;

iii. The relationship of the site to surrounding topographic, water, and cultural features;

iv. Proposed building locations and arrangements; and

v. A legend which includes a complete legal description, acreage of the parcel, scale, north arrow, and date of map revision.

b. Detailed description of vegetation on and adjacent to the project area and its associated buffer;

c. Identification of any species of local importance, priority species, or endangered, threatened, sensitive, or candidate species that have a primary association with habitat on or adjacent to the project area, and assessment of potential project impacts to the use of the site by the species;

d. A discussion of any federal, state, or local special management recommendations, including Washington Department of Fish and Wildlife habitat management recommendations, that have been developed for species or habitats located on or adjacent to the project area;

e. A detailed discussion of the direct and indirect potential impacts on habitat by the project, including potential impacts to water quality;

f. Enhancement of existing degraded buffer area and replanting of the disturbed buffer area with native vegetation;

g. The use of alternative on-site wastewater systems in order to minimize site clearing;

h. Retention of existing native vegetation on other portions of the site in order to offset habitat loss from buffer reduction;

i. The need for fencing and signage along the buffer edge;

j. A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing habitats and restore any habitat that was degraded prior to the current proposed land use activity and to be conducted in accordance with the mitigation sequencing required by this chapter; and

k. A discussion of ongoing management practices that will protect habitat after the project site has been developed, including proposed monitoring, maintenance, and enforcement programs.

6. When appropriate due to the type of habitat or species present or the project conditions, the Director may also require the habitat management plan to include:

a. An evaluation by an independent certified professional regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, to include any recommendations as appropriate;

b. A request for consultation with the Washington Department of Fish and Wildlife or the local Native American Indian tribe or other appropriate agency; and

c. Detailed surface and subsurface hydrologic features both on and adjacent to the site.

7. Mitigation Measures: Possible mitigation measures to be included in the report, or required by the Director, could include, but are not limited to:

a. Establishment of buffer zones;

b. Preservation of critically important plants and trees;

c. Limitation of access to habitat areas;

d. Seasonal restriction of construction activities;

e. Establishing phased development requirements; and

f. Monitoring plan for a period necessary to establish that performance standards have been met. Generally this will be for a period of seven to ten years.

8. HMP Adequacy: The HMP shall demonstrate to the satisfaction of the city that the habitat functions and values are improved by implementation of the HMP. If there is a disagreement between the city and the applicant as to the adequacy of the HMP, the issue of plan adequacy shall be resolved by consulting with the appropriate federal or state agency. If the federal or state agencies are not available in a timely manner, the applicant may choose to have the city refer the HMPs to a third-party consultant at the expense of the applicant. After consultation with such state departments or third-party consultant, the Director shall make a final decision on the adequacy of the HMP.

9. Timing: An HMP must be developed and approved either prior to preliminary plat approval or issuance of the building permit, as applicable, and must be implemented before the city grants either final plat approval or an occupancy permit, as applicable.

10. Any project which requires an HMP shall not be considered SEPA exempt and the HMP shall be processed along with appropriate SEPA review and agency comment as required by Chapter 197-11 WAC.

E. Mitigation Standards and Criteria:

1. The applicant shall avoid all impacts that degrade the functions and values of a critical area or areas. Unless otherwise provided in this title, if alteration to the critical area is unavoidable, all adverse impacts to or from critical areas and buffers resulting from a development proposal or alteration shall be mitigated using the best available science in accordance with an approved habitat management plan and SEPA documents, so as to result in no net loss of critical area functions and values.

2. Mitigation shall be in-kind and on-site, when possible, and sufficient to maintain the functions and values of the critical area, and to prevent risk from a hazard posed by a critical area.

3. Mitigation shall not be implemented until after the city's approval of an HMP that includes a mitigation plan, and mitigation shall be in accordance with the provisions of the approved HMP.

4. Mitigation Sequencing: Applicants shall demonstrate that all reasonable efforts have been examined with the intent to avoid and minimize impacts to critical areas. When an alteration to a critical area is proposed, such alteration shall be avoided, minimized, or compensated for in the following sequential order of preference:

a. Avoiding the impact altogether by not taking a certain action or parts of an action;

b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology, or by taking affirmative steps, such as project redesign, relocation, or timing, to avoid or reduce impacts;

c. Rectifying the impact to habitat conservation areas by repairing, rehabilitating, or restoring the affected environment to the historical conditions or the conditions existing at the time of the initiation of the project;

d. Reducing or eliminating the impact or hazard over time by preservation and maintenance operations during the life of the action;

e. Compensating for the impact to habitat conservation areas by replacing, enhancing, or providing substitute resources or environments; and

f. Monitoring the hazard or other required mitigation and taking remedial action when necessary.

Mitigation for individual actions may include a combination of the above measures.

5. Mitigation Plan Requirements: When mitigation is required, the applicant shall submit for approval by the city a mitigation plan as part of the HMP. The mitigation plan shall include:

a. Environmental Goals and Objectives. The mitigation plan shall include a written report identifying environmental goals and objectives of the compensation proposed and including:

i. A description of the anticipated impacts to the critical areas and the mitigating actions proposed and the purposes of the compensation measures, including the site selection criteria, identification of compensation goals, identification of resource functions, and dates for beginning and completion of site compensation construction activities. The goals and objectives shall be related to the functions and values of the impacted critical area;

ii. A review of the best available science supporting the proposed mitigation and a description of the report author's experience to date in restoring or creating the type of critical area proposed; and

iii. An analysis of the likelihood of success of the compensation project.

b. Performance Standards. The mitigation plan shall include measurable specific criteria for evaluating whether or not the goals and objectives of the mitigation project have been successfully attained and whether or not the requirements of this title have been met.

c. Detailed Construction Plans. The mitigation plan shall include written specifications and descriptions of the mitigation proposed, such as:

i. The proposed construction sequence, timing, and duration;

ii Grading and excavation details;

iii. Erosion and sediment control features;

iv. A planting plan specifying plant species, quantities, locations, size, spacing, and density; and

v. Measures to protect and maintain plants until established.

These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome.

d. Monitoring Program. The mitigation plan shall include a program for monitoring construction of the compensation project and for assessing a completed project (section (F) below, Monitoring and Contingency Plan). A protocol shall be included outlining the schedule for site monitoring (for example, monitoring shall occur in years one, three, five, and seven after site construction), and how the monitoring data will be evaluated to determine if the performance standards are being met. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the compensation project. The compensation project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than five years.

e. Contingency Plan. The mitigation plan shall include identification of potential courses of action, and any corrective measures to be taken if monitoring or evaluation indicates project performance standards are not being met (section (F) below).

f. Financial Guarantees. The mitigation plan shall include financial guarantees, if necessary, to ensure that the mitigation plan is fully implemented. Financial guarantees ensuring fulfillment of the compensation project, monitoring program, and any contingency measures shall be posted in accordance with bonds to ensure mitigation, maintenance, and monitoring (section (F) below).

6. Innovative Mitigation:

a. The city may encourage, facilitate, and approve innovative mitigation projects that are based on the best available science. Advance mitigation or mitigation banking are examples of alternative mitigation projects allowed under the provisions of this section wherein one or more applicants, or an organization with demonstrated capability, may undertake a mitigation project together if it is demonstrated that all of the following circumstances exist:

i. Creation or enhancement of a larger system of critical areas and open space is preferable to the preservation of many individual habitat areas;

ii. The group demonstrates the organizational and fiscal capability to act cooperatively;

iii. The group demonstrates that long-term management of the habitat area will be provided; and

iv. There is a clear potential for success of the proposed mitigation at the identified mitigation site.

F. Monitoring and Contingency Plan:

1. A monitoring program shall be included as a part of the approved mitigation plan for a fish and wildlife habitat conservation area. To ensure that the performance standards of the approved mitigation plan have been met, the mitigation and/or buffer enhancement site(s) shall be monitored for a minimum of five years. A longer monitoring period may be required by the city based on either the initial mitigation plan or a review of subsequent monitoring reports. The monitoring reports shall be submitted on August 1st of each year during the monitoring period. The Director reserves the right to select a qualified consultant, at the applicant's expense, to perform the required monitoring.

An acceptable surety device is required to ensure the applicant's compliance with the terms of the mitigation agreement.

Performance Surety. All mitigation and buffer enhancement shall be completed prior to final plat approval and/or building occupancy depending on the type of application. However, when improvements cannot be completed prior to final acceptance due to weather conditions which may negatively affect the success of the project, a performance surety may be used. The performance surety shall equal 150 percent of the cost of the mitigation project, and the required improvements shall be installed in a satisfactory manner within six months or less.

a. Maintenance Surety. A maintenance surety shall be required on all mitigation projects to ensure that the improvement successfully survives the monitoring periods set above.

i. Mitigation Projects. The amount of the maintenance surety shall be equal to 15 percent of the cost of the mitigation project and the term of the surety shall reflect the term of the monitoring program.

ii. Buffer Enhancement Projects. The amount of the maintenance surety shall be equal to 15 percent of the costs of the enhancement project and the term of the surety shall reflect the term of the monitoring program.

b. Monitoring Deposit. A cash deposit shall be submitted with all sureties prior to final acceptance of the project to cover the estimated city costs to review the yearly monitoring reports and conduct a site inspection to ensure the performance standards are being met.

2. Long-Term Maintenance. To ensure the long-term success of the fish and wildlife habitat conservation area, the applicant or its/his/her heirs or successors shall be responsible for the long-term maintenance of the habitat area and its associated buffer. The habitat and buffer shall be kept clear of weeds, invasive plant material, lawn clippings, junk, debris, intrusions or the like.

15.40.110 Wetlands

A. Description and Purpose:

1. Wetlands are those areas, designated in accordance with the "Washington State Wetland Identification and Delineation Manual" as required by RCW 36.70A.175, that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. All areas within the city meeting the wetland designation criteria in the identification and delineation manual, regardless of any formal identification, are hereby designated critical areas and are subject to the provisions of this title.

2. Wetlands help to maintain water quality; store and convey storm water and floodwater; recharge ground water; provide important fish and wildlife habitat; and serve as areas for recreation, education, scientific study and aesthetic appreciation.

3. The city's overall goal shall be to achieve no net loss of wetlands. This goal shall be implemented through retention of the function and value of wetlands within the city. Wetland buffers serve to moderate runoff volume and flow rates; reduce sediment, chemical nutrient and toxic pollutants; provide shading to maintain desirable water temperatures; provide habitat for wildlife; protect wetland resources from harmful intrusion; and generally preserve the ecological integrity of the wetland area.

4. The primary purpose of the wetland regulations is to avoid detrimental wetland impacts and achieve a goal of no net loss of wetland function and values, and where possible enhance and restore wetlands.

B. Classification and Designation:

1. Wetland Ratings: Wetlands shall be rated according to the Washington State Department of Ecology wetland rating system found in the "Washington State Wetland Rating System for Western Washington" (Department of Ecology Publication No. 04-06-025) or as amended hereafter. These documents contain the definitions and methods for determining if the criteria below are met.

a. Wetland Rating Categories.

i. Category I. Category I wetlands are those that meet any of the following criteria:

(a) Represent a unique or rare wetland type; or

(b) Are more sensitive to disturbance than most wetlands; or

(c) Are relatively undisturbed and contain ecological attributes that are impossible to replace within a human lifetime; or

(d) Are providing a high level of functions, scoring seventy (70) points or more out of one hundred (100) (DOE Wetlands Rating System, 2004); or

(e) Are characterized as a national heritage wetland; or

(f) Are characterized as a bog; or

(g) Are over one (1) acre and characterized as a mature and old-growth forested wetland.

ii. Category II. Category II wetlands are those wetlands that are not Category I wetlands and that meet any of the following criteria:

(a) Provide high levels of some functions, being difficult, though not impossible to replace; or

(b) Perform most functions relatively well, scoring fifty-one (51) through sixty-nine (69) out of one hundred (100) points (DOE Wetlands Rating System, 2004).

iii. Category III. Category III wetlands are those wetlands that are not Category I or II wetlands, and that meet the following criterion:

(a) Provide moderate levels of functions, scoring between thirty (30) through fifty (50) out of one hundred (100) points (DOE Wetlands Rating System, 2004).

iv. Category IV. Category IV wetlands are those that meet the following criterion:

(a) Provide low levels of functions, scoring less than thirty (30) out of one hundred (100) points (DOE Wetlands Rating System, 2004).

b. Date of Wetland Rating. Wetland rating categories shall be applied as the wetland exists on the date of adoption of the rating system by the local government as the wetland naturally changes thereafter, or as the wetland changes in accordance with permitted activities. Wetland rating categories shall not change due to illegal modifications.

C. Development Standards – Wetlands:

1. Activities may only be permitted in a wetland or wetland buffer if the applicant can show that the proposed activity will not degrade the functions and functional performance of the wetland and other critical areas.

2. Activities and uses shall be prohibited in wetlands and wetland buffers, except as provided for in this title.

3. Category I Wetlands: Activities and uses shall be prohibited from Category I, except as provided for in the public agency and utility exception, reasonable use exception, and variance sections of this title.

4. Category II and III Wetlands: With respect to activities proposed in Category II and III wetlands, the following standards shall apply:

a. Water-dependent activities may be allowed where there are no feasible alternatives that would have a less adverse impact on the wetland, its buffers and other critical areas.

b. Where nonwater-dependent activities are proposed, it shall be presumed that alternative locations are available, and activities and uses shall be prohibited, unless the applicant demonstrates that:

i. The basic project purpose cannot reasonably be accomplished by successfully avoiding the wetland, or result in less adverse impact on a wetland on another site or sites in the general region;

ii. All alternative designs of the project as proposed that would avoid or result in less of an adverse impact on a wetland or its buffer, such as a reduction in the size, scope, configuration, or density of the project, are not feasible; and

iii. Full compensation for the acreage and loss functions will be provided under the terms established under sections (D)(6) and (D)(7) below.

5. Category IV Wetlands: Activities and uses that result in unavoidable and necessary impacts may be permitted in Category IV wetlands and associated buffers in accordance with an approved wetland report and mitigation plan, if the proposed activity is the only reasonable alternative that will accomplish the applicant's objectives. Full compensation for the acreage and loss functions will be provided under the terms established under sections (D)(6) and (D)(7) below.

6. Wetland Buffers:

a. Standard Buffer Widths. The standard buffer widths presume the existence of a relatively intact native vegetation community in the buffer zone adequate to protect the wetland functions and values at the time of the proposed activity. If the vegetation is inadequate, then the buffer width shall be increased or the buffer should be planted to maintain the standard width. Required standard wetland buffers, based on wetland category, are as follows:

Wetland Category	Standard Buffer
I	200 ft.
II	100 ft.
III	75 ft.
IV	50 ft.

b. Measurement of Wetland Buffers. All buffers shall be measured horizontally from a perpendicular line established at the wetland edge as surveyed in the field. The width of the wetland buffer shall be determined according to the wetland category. The buffer for a wetland created, restored, or enhanced as compensation for approved wetland alterations shall be the same as the buffer required for the category of the created, restored, or enhanced wetland. Only fully vegetated buffers will be considered. Lawns, walkways, driveways, and other mowed or paved areas will not be considered buffers.

c. Increased Wetland Buffer Widths. The Director shall require increased buffer widths in accordance with the recommendations of an experienced, certified professional wetland scientist, and the best available science on a case-by-case basis when a larger buffer is necessary to

protect wetland functions and values based on site-specific characteristics. This determination shall be based on one (1) or more of the following criteria:

i. A larger buffer is needed to protect other critical areas;

ii. The buffer or adjacent uplands has a slope greater than 15 percent or is susceptible to erosion and standard erosion-control measures will not prevent adverse impacts to the wetland; or

iii. The buffer area has minimal vegetative cover. In lieu of increasing the buffer width where existing buffer vegetation is inadequate to protect the wetland functions and values, implementation of a buffer planting plan may substitute. Where a buffer planting plan is proposed, it shall include densities that are not less than 3 feet on center for shrubs and 8 feet on center for trees and require monitoring and maintenance to ensure success. Existing buffer vegetation is considered "inadequate" and will need to be enhanced through additional native plantings and (if appropriate) removal of nonnative plants when: (1) nonnative or invasive plant species provide the dominant cover, (2) vegetation is lacking due to disturbance and wetland resources could be adversely affected, or (3) enhancement plantings in the buffer could significantly improve buffer functions.

iv. An increase in buffer width onsite or restoration of existing buffer required under this section shall be directed to modifications reasonably necessary to mitigate impacts created by the proposed development and roughly proportional to the scope and scale of the impacts created by the proposed development.

d. Wetland Buffer Width Averaging. The Director may allow modification of the standard wetland buffer width in accordance with an approved wetland report and the best available science on a case-by-case basis by averaging buffer widths. Averaging of buffer widths may only be allowed where the applicant and a certified professional wetland scientist demonstrates that:

i. No feasible site design exists without buffer averaging;

ii. It will not reduce wetland functions or functional performance;

iii. The wetland contains variations in sensitivity due to existing physical characteristics or the character of the buffer varies in slope, soils, or vegetation, and the wetland would benefit from a wider buffer in places and would not be adversely impacted by a narrower buffer in other places;

iv. The total area contained in the buffer area after averaging is no less than that which would be contained within the standard buffer; and

v. The buffer width is not reduced to less than 75 percent of the standard buffer width, applicable to the wetland category, or 35 feet for Category IV wetlands.

e. Buffer Consistency. All mitigation sites shall have buffers consistent with the buffer requirements of this chapter.

f. Buffer Maintenance. Except as otherwise specified or allowed in accordance with this title, wetland buffers shall be retained in an undisturbed or enhanced condition. Removal of invasive nonnative weeds is required for the duration of the mitigation bond.

g. Buffer Uses. The following uses may be permitted within a wetland buffer in accordance with the review procedures of this title, provided they are not prohibited by any other applicable law and they are conducted in a manner so as to minimize impacts to the buffer and adjacent wetland:

i. Conservation and Restoration Activities. Conservation or restoration activities aimed at protecting the soil, water, vegetation, or wildlife.

ii. Passive Recreation. Low-impact uses and activities which are consistent with the purpose and function of the wetland buffer and do not detract from its integrity may be permitted within the buffer depending on the sensitivity of the wetland. Uses may include:

(a) Walkways and trails; provided, that those pathways that are generally parallel to the perimeter of the wetland may be located in the buffer area; provided, that:

(1) They are no wider than 6 feet, and generally constructed with a surface that does not interfere with substrate permeability. Raised boardwalks utilizing nontreated pilings may be acceptable; and

(2) They shall be limited to pedestrian use; and

(3) They shall not be allowed to fully enclose a habitat area or buffer; and

(4) They are subject to closure (at the Director's discretion) during critical spawning, migration or breeding time periods of the species present; and

(5) May be located within the outer 25 percent of the buffer, except for limited focused access points

(b) Wildlife viewing structures; and

(c) Fishing access areas down to the water's edge that shall be no larger than six feet.

iii. Storm Water Management Facilities. Storm water management facilities, limited to storm water dispersion outfalls and bioswales, may be allowed within the outer 25 percent of the buffer of Category III or IV wetlands only; provided, that:

(a) No other location is feasible; and

(b) The location of such facilities will not degrade the functions or values of the wetland; and

(c) Low impact development guidelines include Low Impact Development Technical Guidance Manual for Puget Sound (January 2005).

iv. Low-Impact Development (LID) Facilities. LID facilities may be allowed within the buffer of Category III or IV wetlands only; provided, that:

(a) No other location is feasible; and

(b) The location of such facilities will not degrade the functions or values of the wetland.

7. Signs and Fencing of Wetlands:

a. Temporary Markers. The outer perimeter of the wetland or buffer and the limits of those areas to be disturbed pursuant to an approved permit or authorization shall be marked in the field in such a way as to ensure that no unauthorized intrusion will occur and will be subject to inspection prior to the commencement of permitted activities. This temporary marking shall be maintained throughout construction and shall not be removed until permanent signs, if required, are in place.

b. Permanent Signs. As a condition of any permit or authorization issued pursuant to this chapter, the Director may require the applicant to install permanent signs along the boundary of a wetland or buffer.

i. Permanent signs shall be made of an enamel-coated metal face and attached to a metal post, or another nontreated material of equal durability. Signs must be posted at an interval of one per lot or every 50 feet, whichever is less, and must be maintained by the property owner in perpetuity. The sign shall be worded as follows or with alternative language approved by the Director:

Protected Wetland Area
Do Not Disturb
Contact City of Mount Vernon

c. Fencing.

i. The Director shall determine if fencing is necessary to protect the functions and values of the critical area. If found to be necessary, any permit or authorization issued pursuant to this chapter shall be conditioned to require the applicant to install a permanent fence at the edge of the wetland buffer when fencing will prevent future impacts to the wetland.

ii. Fencing installed as part of a proposed activity or as required in this subsection shall be designed so as to not interfere with species migration, including fish runs, and shall be constructed in a manner that minimizes impacts to the wetland and associated habitat.

D. Mitigation Requirements – Wetlands:

Compensatory mitigation for alterations to wetlands shall achieve equivalent or greater biologic functions. Compensatory mitigation plans shall be consistent with the State Department of Ecology publication " Wetland Mitigation in Washington State," 2006 (Publication Nos. 06-06-011a and 06-06-011b), or as revised.

1. Mitigation includes the following alternatives. The priority shall be as follows, but may be modified where functions and values are retained, restored, or enhanced by alternate systems:

a. Avoiding the impact altogether by not taking a certain action or parts of an action.

b. Minimizing impacts by limiting the degree or magnitude of the action and its implementation by using appropriate technology, or by taking affirmative steps to avoid or reduce impacts.

c. Rectifying the impact by repairing, rehabilitating, or restoring the affected environment.

d. Reducing or eliminating the impact over time by preservation and maintenance operations.

e. Compensating for the impact by replacing, enhancing, or providing substitute resources or environments.

2. Mitigation for Lost or Affected Functions: Compensatory mitigation actions shall address functions affected by the alteration to achieve functional equivalency or improvement and shall provide similar wetland functions as those lost, except when:

a. The lost wetland provides minimal functions as determined by a site-specific function assessment, and the proposed compensatory mitigation action(s) will provide equal or greater functions or will provide functions shown to be limiting within a watershed through a formal Washington State watershed assessment plan or protocol; or

b. Out-of-kind replacement will best meet formally identified watershed goals, such as replacement of historically diminished wetland types.

3. Preference of Mitigation Actions: Mitigation actions that require compensation by replacing, enhancing, or substitution shall occur in the following order of preference:

a. Restoring wetlands on upland sites that were formerly wetlands.

b. Creating wetlands on disturbed upland sites such as those with vegetative cover consisting primarily of nonnative introduced species. This should only be attempted when there is a consistent source of hydrology and it can be shown that the surface and subsurface hydrologic regime is conducive for the wetland community that is being designed.

c. Enhancing significantly degraded wetlands in combination with restoration or creation. Such enhancement should be part of a mitigation package that includes replacing the impacted area, meeting appropriate ratio requirements.

4. Type and Location of Mitigation. Unless it is demonstrated that a higher level of ecological functioning would result from an alternate approach, compensatory mitigation for ecological functions shall be either in-kind and on-site, or in-kind and within the same stream reach, or subbasin. Mitigation actions shall be conducted within the same subdrainage basin and on the site as the alteration except when all of the following apply:

a. There are no reasonable on-site or in-subdrainage basin opportunities or on-site and in-subdrainage basin opportunities do not have a high likelihood of success, after a determination of the natural capacity of the site to mitigate for the impacts. Consideration should include: anticipated wetland mitigation replacement ratios, buffer conditions and proposed widths, hydrogeomorphic classes of on-site wetlands when restored, proposed flood storage capacity, proposed water quality improvements, potential to mitigate riparian fish and wildlife impacts (such as connectivity);

b. Off-site mitigation has a greater likelihood of providing equal or improved wetland functions than the impacted wetland; and

c. Off-site locations shall be in the same subdrainage basin unless:

i. Established watershed goals for water quality, flood or conveyance, habitat, or other wetland functions have been established and strongly justify location of mitigation at another site; or

ii. Credits from a state-certified wetland mitigation bank are used as mitigation and the use of credits is consistent with the terms of the bank's certification.

5. Mitigation Timing: Mitigation projects shall be completed with an approved monitoring plan prior to activities that will disturb wetlands. In all other cases, mitigation shall be completed immediately following disturbance and prior to use or occupancy of the activity or development. Construction of mitigation projects shall be timed to reduce impacts to existing fisheries, wildlife, and flora.

a. The Director may authorize a one-time temporary delay, up to 120 days, in completing minor construction and landscaping when environmental conditions could produce a high probability of failure or significant construction difficulties. The delay shall not create or perpetuate hazardous conditions or environmental damage or degradation, and the delay shall not be injurious to the health, safety, and general welfare of the public. The request for the temporary delay must include a written justification that documents the environmental constraints that preclude implementation of the mitigation plan. The justification must be verified and approved by the city and include a financial guarantee.

6. Mitigation Ratios:

a. Acreage Replacement Ratios. The following ratios shall apply to creation or restoration that is in-kind, within the same drainage basin, is the same category, is timed prior to or concurrent with alteration, and has a high probability of success. These ratios do not apply to remedial actions resulting from unauthorized alterations; greater ratios shall apply in those cases. These ratios do not apply to the use of credits from a state-certified wetland mitigation bank. When credits from a certified bank are used, replacement ratios should be consistent with the requirements of the bank's certification. The first number specifies the acreage of replacement wetlands and the second specifies the acreage of wetlands altered.

Category I	6-to-1
Category II	3-to-1
Category III	2-to-1
Category IV	1.5-to-1

b. Increased Replacement Ratio. The Director may increase the ratios under the following circumstances:

i. Uncertainty exists as to the probable success of the proposed restoration or creation;

ii. A significant period of time will elapse between impact and replication of wetland functions;

iii. Proposed mitigation, without increase, will result in a lower category wetland or reduced functions relative to the wetland being impacted; or

iv. The impact was an unauthorized impact.

7. Wetlands Enhancement as Mitigation:

a. Impacts to wetland functions may be mitigated by enhancement of existing significantly degraded wetlands, but must be used in conjunction with restoration and/or creation. Applicants proposing to enhance wetlands must produce a wetland report that identifies how enhancement will increase the functions of the degraded wetland and how this increase will adequately mitigate for the loss of wetland area and function at the impact site.

b. At a minimum, enhancement acreage shall be double the acreage required for creation or restoration under subsection (f)(1) of this section. The ratios shall be greater than double the required acreage where the enhancement proposal would result in minimal gain in the performance of wetland functions and/or result in the reduction of other wetland functions currently being provided in the wetland.

c. Mitigation ratios for enhancement in combination with other forms of mitigation shall range from 6:1 to 3:1 and be limited to Class III and Class IV wetlands.

d. Any approval under subsections (b) and (c) above shall be consistent with Table 1a of Wetland Mitigation in Washington State, Part I (Ecology, et al., 2006)

8. Wetland Mitigation Banks:

a. Credits from a wetland mitigation bank may be approved for use as compensation for unavoidable impacts to wetlands when:

i. The bank is certified under Chapter 173-700 WAC; and

ii. The Director determines that the wetland mitigation bank provides appropriate compensation for the authorized impacts; and

iii. The proposed use of credits is consistent with the terms and conditions of the bank's certification.

b. Replacement ratios for projects using bank credits shall be consistent with replacement ratios specified in the bank's certification.

c. Credits from a certified wetland mitigation bank may be used to compensate for impacts located within the service area specified in the bank's certification. In some cases, bank service areas may include portions of more than one adjacent drainage basin for specific wetland functions.

9. Wetland Mitigation Monitoring: The mitigation plan shall include a program for monitoring construction of the compensation project and for assessing a completed project. A protocol shall be included outlining the schedule for site monitoring, monitoring standards, and how the monitoring data will be evaluated. A monitoring report shall be submitted as needed to document milestones, successes, problems, and contingency actions of the compensation project. The compensation project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than five (5) years.

E. Performance Standards – Subdivisions:

The subdivision and short subdivision of land in wetlands and associated buffers is subject to the following:

1. Land that is located wholly within a wetland or its buffer may not be subdivided.

2. Land that is located partially within a wetland or its buffer may be subdivided; provided, that an accessible and contiguous portion of each new lot is located outside of the wetland and its buffer.

3. Access roads and utilities serving the proposed subdivision may be permitted within the wetland and associated buffers only if the city determines that no other feasible alternative exists and when consistent with this title.

F. Wetland Report:

Critical area reports for wetlands must meet the requirements of this section.

1. Preparation by a Certified Professional: A critical area report for wetlands shall be prepared by a certified professional who is a certified professional wetland scientist or a noncertified professional wetland scientist with a minimum of five (5) years experience in the field of wetland science and with experience preparing wetland reports.

2. Area Addressed in Wetland Report: The following areas shall be addressed in a critical area report for wetlands:

a. The project area of the proposed activity;

b. All wetlands and recommended buffers within 300 feet of the project area; and

c. All shoreline areas, water features, floodplains, and other critical areas, and related buffers within 300 feet of the project area.

3. Wetland Analysis. A critical area report for wetlands shall contain an analysis of the wetlands including the following site- and proposal-related information at a minimum:

a. A written assessment and accompanying maps of the wetlands and buffers within 300 feet of the project area, including the following information at a minimum:

i. Wetland delineation and required buffers;

ii. Existing wetland acreage;

iii. Wetland category;

iv. Vegetative, faunal, and hydrologic characteristics;

v. Soil and substrate conditions;

vi. Topographic elevations, at two-foot contours; and

vii. A discussion of the water sources supplying the wetland and documentation of hydrologic regime (locations of inlet and outlet features, water depths throughout the wetland, evidence of recharge or discharge, evidence of water depths throughout the year: drift lines, algal layers, moss lines, and sediment deposits); and

viii. Wetland delineation data sheets and rating forms.

b. A discussion of measures, including avoidance, minimization, and mitigation, proposed to preserve existing wetlands and restore any wetlands that were degraded prior to the current proposed land use activity.

c. A habitat and native vegetation conservation strategy that addresses methods to protect and enhance on-site habitat and wetland functions.

d. Functional evaluation for the wetland and adjacent buffer using a local or state agency staff-recognized method and including the reference of the method and all data sheets. The director shall identify applicable guidance documents by Rule.

e. Proposed mitigation, if needed, including a written assessment and accompanying maps of the mitigation area, including the following information at a minimum:

i. Existing and proposed wetland acreage;

ii. Vegetative and faunal conditions;

iii. Surface and subsurface hydrologic conditions including an analysis of existing and future hydrologic regime and proposed hydrologic regime for enhanced, created, or restored mitigation areas;

iv. Relationship within watershed and to existing water bodies;

v. Soil and substrate conditions, and topographic elevations;

vi. Existing and proposed adjacent site conditions;

vii. Required wetland buffers (including any buffer reduction and mitigation proposed to increase the plant densities, remove weedy vegetation, and replant the buffers);

viii. Property ownership; and

ix. Associated wetlands and related wetlands that may be greater than 300 feet from the subject project.

f. A scale map of the development proposal site and adjacent area. A discussion of ongoing management practices that will protect wetlands after the project site has been developed, including proposed monitoring and maintenance programs.

g. A bond estimate for the installation (including site preparation, plant materials and installation, fertilizers, mulch, stakes) and the proposed monitoring and maintenance work for the required number of years.

h. Title Notification. All activity in critical area protection areas shall be accompanied by a title.

4. Additional Information: When appropriate, the Director may also require the wetland report to include an evaluation by the State Department of Ecology or an independent qualified expert regarding the applicant's analysis and the effectiveness of any proposed mitigating measures or programs, and to include any recommendations as appropriate.

a. If the development proposal site contains or is within a wetland area, the applicant shall submit an affidavit which declares whether the applicant has knowledge of any illegal alteration to any or all wetlands on the proposed site and whether the applicant previously has been found in violation of this chapter. If the applicant has been found previously in violation, the applicant shall declare whether such violation has been corrected to the satisfaction of the jurisdiction.

b. The Director shall determine if the mitigation and monitoring plans and bonding measures proposed by the applicant are sufficient to protect the public health, safety, and welfare, consistent with the goals, purposes, objectives and requirements of this chapter.

G. Piped Streams:

1. Building over a natural stream that is located in an underground pipe or culvert, except as allowed in section (H) for transportation or utility crossings, is prohibited. Relocation of the piped stream system around structures is allowed. The relocated system shall be sized to convey the 100-year future land use condition runoff from the total upstream tributary area as determined from a hydrologic and hydraulic analysis performed in accordance with standards determined by the city.

2. No Riparian Management Zones are required along segments of piped or culverted streams unless designated by the city for removal. Any easements or setbacks from pipes or culverts shall be consistent with adopted city regulations or design standards as administered by the City Public Works Department. Setback requirements will include an easement over the piped stream system and a building setback from the edge of the easement. The city will determine the setback requirement during the permit review process. The setback size will be dependent upon the required amount of space that would be needed for maintenance, operation and future replacement of the piped stream system.

H. Use of Mitigation Bank for Offsite Compensation for Increased Impervious Surfaces:

1. Credits from a universal or riparian mitigation bank may be approved for use as compensation for unavoidable impacts to streams and riparian management zones when:

a. The bank is certified by state and/or federal agencies;

b. The Director determines that the mitigation bank provides appropriate compensation for the authorized impacts; and

c. The proposed use of credits is consistent with the terms and conditions of the bank's certification.

2. Replacement ratios for projects using bank credits shall be consistent with the terms and conditions of the bank's certification.

3. Credits from a certified universal or riparian mitigation bank may be used to compensate for impacts located within the service area specified in the bank's certification. In some cases, bank service areas may include portions of more than one adjacent drainage basin for specific riparian functions.

15.40.120 Waters/Wetlands Ecosystem Alternative

A. Purpose:

The purpose of this section is to provide an alternative to Wetlands and Fish and Wildlife Habitat Conservation Area regulations for waters and wetland stream ecosystems in Mount Vernon and considering the associated UGA. The ecosystem requires identification and permitting of a water/wetlands management system which addresses the city's waters and wetlands ecosystem as a whole, and is designed to:

1. Optimize efficient use of lands within the urban areas.

2. Encourage restoration and enhancement of existing degraded waters and wetland ecosystems, including their buffers.

3. Provide options and alternatives in urban areas to achieve some required functions and protections onsite, including hydrology and water quality, and other functions offsite, such as habitat, where increased long-term benefits may be achieved.

4. Avoid the creation of narrow linear patchwork buffers which maximize edge effect and optimize the ability to restore meaningful patches where available to achieve long-term benefit to the ecosystem functions and values within the city.

5. Avoid the creation of widespread nonconforming uses which lock in current degraded conditions and create pressure for expansion of UGAs into neighboring lands.

6. Provide a system of implementation, management and enforcement which assures no net loss of waters/wetlands system function, while recognizing that not all functions will be achieved in all locations, and some functions may be compromised in one location to enable compact urban development, and compensated for elsewhere in the system where better long-term benefit can be achieved and maintained.

7. This section is applicable to new development and any redevelopment within an ecosystem management zone, and applies to any combination of streams alone, wetlands alone, or wetlands and streams in combination.

B. Approach:

1. The city is divided into seven subbasins, each of which together with its connection to the Skagit River system, provides an appropriate regulatory waters/wetland ecosystem for regulatory purposes to provide identification and protection of ecosystem functions which include:

a. Hydrology (water quantity)

b. Bio/geochemistry (water quantity)

c. Plant community

d. Faunal support

2. The approach is based on detailed review of the basins and critical area habitat and wetland recommendations appropriate to the functions and values provided to the Mount Vernon geographic setting and the competing needs of assuring long-term protection and maintenance of functions and values with an objective of creating long-term gain within the community, and the need to accommodate compact urban growth to achieve the residential, commercial and industrial needs of the community. The system is also designed to provide special attention to the needs of anadromous fish.

3. Minimum standards are defined by basin, based upon existing conditions and demand for future development and the pressure that development may impose on the waters/wetlands ecosystem. The city has a significant resource of publicly owned lands and other lands available for restoration and enhancement which provides the base resource necessary to achieve the goals of this program.

4. Direct critical area impact. Direct critical area impact (construction which is located within the critical area edge), including any construction in wetlands and/or streams, shall be governed by the same guidelines in the optional system as set out in the default system. See MVMC 15.40.090(C) and MVMC 15.40.110(C), provided that with respect to mitigation buffers, mitigation may be pursuant to the optional program.

C. Glossary:

For this waters/wetlands ecosystem management program, the following terms shall have the meanings set forth below;

1. Critical area:

a. Streams as defined in MVMC 15.40.040 above.

b. Wetlands as defined in MVMC 15.40.110(B) above.

c. Combined system: Any combination of streams and wetlands in direct association (the distance between the functioning streams and wetlands is less than the minimum buffers set forth below) shall be considered and regulated as a combined system.

2. Critical area edge.

a. Streams and Water Bodies—The line of ordinary high water, as determined in the field.

b. Wetlands—The outer limit of the delineated wetlands in accordance with delineation criteria pursuant to manuals adopted under RCW 36.70A.137.

c. Combined system edge: The greater of (a) or (b) above when a system is treated as a combined system as provided in (1)(c) above.

d. Where the wetland, stream or combined system is in a geologic area subject to geologic area guidelines under this ordinance, the critical area setback shall be measured from the greater of the critical area in (2)(a), (b), or (c), above, or the top of bank under geologic regulations, whichever is greater.

3. Management zone: The area between the critical area edge and the nearest paved public street or 200 feet, whichever is less, provided, however, where the paved street merely bisects a critical area, the management zone shall be 200 feet from the critical area edge.

4. Impervious surface: Surfaces which shed rather than contain and filter storm water, including but not limited to paved, graveled or lawn surfaces, and other surfaces with similar runoff characteristics as determined by the Director, and surfaces covered by structures.

5. Setbacks: The shortest physical distance a new structure or impervious surface may be constructed in a management zone as measured from the critical area edge.

6. Management zone buffer: The area of existing or restored vegetation within a management zone between the critical area edge and the nearest allowed impervious surface

7. Undeveloped buffer: Property between the critical area edge and existing impervious or developed (including farmed) property. Developed property may include property now covered with weeds, invasive species, or species other than the native buffer constituents common to the Mount Vernon subbasin in which the site is located.

8. Stream reaches and combined systems:

a. Low gradient: -< 1%

b. Medium gradient: 1%-2%

c. High gradient: > 2%

d. Open systems: Systems with existing natural vegetated buffers of 50 feet or more.

e. Closed systems: Systems in pipes or other completely confined structures.

f. Managed systems: Systems which do not fit open or closed definitions.

9. Wetland systems not associated with a stream

a. Open systems – Wetland areas abutted by intact natural area buffer vegetation 50 feet or more in width from critical area edge.

b. Managed system – Wetlands which do not fit the definition of an open system.

9. Critical Area Management Fund: A dedicated fund in the City of Mount Vernon managed through the storm water management program, which shall collect fees as identified below and expend such fees in accordance with a mitigation plan developed for the city and implemented to achieve the objectives of this program.

10. Subbasin management area: One of eight geographic areas identified below and mapped on city zoning maps which include both streams and wetland systems within the defined basin which are functionally related, whether or not hydraulically connected through surface flow. For some purposes, including habitat mitigation, the Skagit River.

D. Subbasin Management Program:

1. Kulshan Creek Management Recommendations

a. Current conditions

i. Consists of batture reaches, piped reaches, managed reaches, and natural reaches.

ii. Flows through densely developed areas.

iii. Highly altered and channeled in managed systems.

iv. City owns the batture park and upstream area suitable for meaningful restoration.

b. Management zone: 200 feet or first paved street, whichever is less, provided, however, where the paved street merely bisects a critical area, the management zone shall be 200 feet from the critical area edge.

c. Stream and associated wetland setbacks.

d. Standard setbacks from critical area edge.

15.40.120 Table A, Kulshan Creek			
F/NP/II, III	Open	Closed	Managed
Low gradient	75 feet	0	50 feet
Moderate/high	50 feet	0	25 feet
Minimum setback	50%	n/a	25 feet
NS/IV	50 feet	0	25 feet
Minimum setback	50%	n/a	25 feet

e. Standard and Degraded Condition Restoration: Within the standard buffers, and within any degraded buffer area as defined below, the following conditions apply. Degraded buffer area is defined as follows: Except for S shorelines, where setback area is developed/degraded below the minimum setback noted above, the minimum setback to any impervious surface shall be to the edge of the existing undeveloped buffer, but not less than 15 feet from ordinary high water or 7-1 slope from the bottom elevation of the stream system, whichever is greater. The standard or degraded buffer area setback shall be shown on the approved site plan and if found to be in a degraded condition under the City functional assessment model, such degraded condition shall be subject to upgrade and restoration as follows: (i) manage and treat all storm water from the developed site and treat such water pursuant to the adopted storm water manual prior to discharge into the degraded area setback, (ii) removal of invasive weeds, debris and trash, and any blockage to longitudinal and/or lateral flow in the on-site stream section, (iii) restoration planting of natural vegetation appropriate to the site condition according to City guidelines.

f. Limitations and considerations: Development permits issued in this subbasin shall be subject to the following conditions and criteria:

i. For all new impervious surface in management zone:

(a) 1/1 habitat restoration contribution, for development in non-tree canopy area.

(1) Management fund contribution $1.00 per square foot.

(b) 1/1 habitat restoration contribution for removal of tree canopy, charges based on cost of basin restoration plan.

(1) Management fund contribution $2.00 per square foot.

ii. For all new impervious surface in setback area

(a) 2-1 habitat restoration contribution. (between standard and minimum setback referred to in Table A):

(1) Management fund contribution $4.00 per square foot.

2. Trumpeter Creek Management Recommendations

a. Current conditions:

i. Consists of long managed reaches with close proximity to development, piped, and natural reaches.

ii. Flows through developed areas, but also has open systems in good condition in all gradient reaches.

iii. City owns Baker Park area surrounding the stream and upstream areas suitable for meaningful restoration.

b. Management zone: 200 feet or first paved street.

c. Stream and associated wetland setbacks.

d. Standard setbacks from critical area edge.

15.40.120 Table B, Trumpeter Creek			
F/NP/II, III	Open	Closed	Managed
Low gradient	75 feet	0	50 feet
Moderate/high	50 feet	0	25 feet
Minimum setback	50%	n/a	25 feet
NS/IV	50 feet	0	25 feet
Minimum setback	50%	n/a	25 feet

e. Standard and Degraded Condition Restoration: Within the standard buffers, and within any degraded buffer area as defined below, the following conditions apply. Degraded buffer area is defined as follows: Except for S shorelines, where setback area is developed/degraded below the minimum setback noted above, the minimum setback to any impervious surface shall be to the edge of the existing undeveloped buffer, but not less than 15 feet from ordinary high water or 7-1 slope from the bottom elevation of the stream system, whichever is greater. The standard or degraded buffer area setback shall be shown on the approved site plan and if found to be in a degraded condition under the City functional assessment model, such degraded condition shall be subject to upgrade and restoration as follows: (i) manage and treat all storm water from the developed site and treat such water pursuant to the adopted storm water manual prior to discharge into the degraded area setback, (ii) removal of invasive weeds, debris and trash, and any blockage to longitudinal and/or lateral flow in the on-site stream section, (iii) restoration planting of natural vegetation appropriate to the site condition according to City guidelines.

f. Limitations and considerations”

i. For all new impervious surface in management zone:

(a) 1.5/1 habitat restoration contribution, non-tree canopy.

(1) Management fund contribution $1.50 per square foot.

(b) 2/1 habitat restoration contribution for removal of tree canopy, charges based on cost of basin restoration plan.

(1) Management fund contribution $4.00 per square foot.

ii. For all new impervious surface in setback area (between standard and minimum setback referred to in Table B):

(a) 2-1 habitat restoration contribution.

(1) Management fund contribution $4.00 per square foot.

3. Maddox Creek Management Recommendations

a. Current conditions”

i. High value salmon stream—no barrier to Skagit River.

ii. Flows through heavily developed areas in middle and lower reaches.

iii. Important to protect longitudinal connections and terrestrial/water interface in upper reaches, and water quality in all reaches.

b. Management zone: 200 feet or first paved street.

c. Stream and associated wetland setbacks:

d. Standard setbacks from critical area edge.

15.40.120 Table C, Maddox Creek			
F/NP/II, III	Open	Closed	Managed
Low gradient	75 feet	0	50 feet
Moderate/high	50 feet	0	25 feet
Minimum setback	50%	n/a	25 feet
NS/IV	50 feet	0	25 feet
Minimum setback	50%	n/a	25 feet

e. Standard and Degraded Condition Restoration: Within the standard buffers, and within any degraded buffer area as defined below, the following conditions apply. Degraded buffer area is defined as follows: Except for S shorelines, where setback area is developed/degraded below the minimum setback noted above, the minimum setback to any impervious surface shall be to the edge of the existing undeveloped buffer, but not less than 15 feet from ordinary high water or 7-1 slope from the bottom elevation of the stream system to the existing native vegetation, whichever is greater. The standard or degraded buffer area setback shall be shown on the approved site plan and if found to be in a degraded condition under the City functional assessment model, such degraded condition shall be subject to upgrade and restoration as follows: (i) manage and treat all storm water from the developed site and treat such water pursuant to the adopted storm water manual prior to discharge into the degraded area setback, (ii) removal of invasive weeds, debris and trash, and any blockage to longitudinal and/or lateral flow in the on-site stream section, (iii) restoration planting of natural vegetation appropriate to the site condition according to City guidelines.

f. Limitations and considerations:

i. For all new impervious surface in management zone:

(a) 1.5/1 habitat restoration contribution non-tree canopy.

(1) Management fund contribution $1.50 per square foot.

(b) 2/1 habitat restoration contribution for removal of tree canopy, charges based on cost of basin restoration plan.

(1) Management fund contribution $4.00 per square foot.

ii. For all new impervious surface in setback area (between standard and minimum setback referred to in Table C):

(a) 2-1 habitat restoration contribution.

(1) Management fund contribution $4.00 per square foot.

4. Nookachamps Basin Management Recommendations

Except where the system borders or is incorporated in the golf course, the Nookachamps basin would follow the default system only.

Within the Golf Course proper:

a. Current conditions:

i. Upper reaches encompassed in an existing development.

ii. Headwaters/high gradient reaches principally surrounded by golf facilities.

iii. In the upper high gradient reaches, limited new development without redevelopment of the golf course.

iv. Mitigation opportunities for the golf course: Any permit would require upgrade to Audubon standards or equivalent professional standard for water and nutrient treatment (hole-by-hole standard).

b. Management zone: 200 feet or first paved street.

c. Stream and associated wetland setbacks.

d. Standard setbacks from critical area edge.

15.40.120 Table D, Nookachamps Basin			
F/NP/II, III	Open	Closed	Managed
Low gradient	75 feet	0	50 feet
Moderate/high	50 feet	0	25 feet
Minimum setback	50%	n/a	25 feet
NS/IV	50 feet	0	25 feet
Minimum setback	50 feet	0	25 feet

e. Standard and Degraded Condition Restoration: Within the standard buffers, and within any degraded buffer area as defined below, the following conditions apply. Degraded buffer area is defined as follows: Except for S shorelines, where setback area is developed/degraded below the minimum setback noted above, the minimum setback to any impervious surface shall be to the edge of the existing undeveloped buffer, but not less than 15 feet from ordinary high water or 7-1 slope from the bottom elevation of the stream system to the existing native vegetation, whichever is greater. The standard or degraded buffer area setback shall be shown on the approved site plan and if found to be in a degraded condition under the City functional assessment model, such degraded condition shall be subject to upgrade and restoration as follows: (i) manage and treat all storm water from the developed site and treat such water pursuant to the adopted storm water manual prior to discharge into the degraded area setback, (ii) removal of invasive weeds, debris and trash, and any blockage to longitudinal and/or lateral flow in the on-site stream section, (iii) restoration planting of natural vegetation appropriate to the site condition according to City guidelines.

f. Limitations and considerations:

i. For all new impervious surface in management zone:

(a) 1.5/1 habitat restoration contribution, non-tree canopy.

(1) Management fund contribution $1.50 per square foot.

(b) 2/1 habitat restoration contribution for removal of tree canopy, charges based on cost of basin restoration plan.

(1) Management fund contribution $4.00 per square foot.

ii. For all new impervious surface in setback area (between standard and minimum setback referred to in Table D):

(a) 2-1 habitat restoration contribution.

(1) Management fund contribution $4.00 per square foot.

5. Carpenter Creek Management Recommendations

The Carpenter Creek basin would follow the default alternative.

a. Current conditions:

i. High value relatively intact waters/wetlands ecosystem.

ii. In upper reaches within the UGA, little impact from current development.

iii. Steep slopes.

iv. On-site, in-kind protection for water quality, quantity and habitat is the preferred option.

b. Management zone: 200 feet or first paved street.

c. Stream and associated wetland setbacks.

d. Standard setbacks from critical area edge.

15.40.120 Table E, Carpenter Creek			
F/NP/II, III	*Open*	*Closed*	*Managed*
Low/moderate	*100 feet*	*0*	*50 feet*
High	*100 feet*	*0*	*50 feet*
Minimum setback	*25%*	*n/a*	*25 feet*
NS/IV	*50 feet*	*0*	*50 feet*
Minimum setback	*50%*	*n/a*	*25 feet*

e. Standard and Degraded Condition Restoration: Within the standard buffers, and within any degraded buffer area as defined below, the following conditions apply. Degraded buffer area is defined as follows: Except for S shorelines, where setback area is developed/degraded below the minimum setback noted above, the minimum setback to any impervious surface shall be to the edge of the existing undeveloped buffer, but not less than 15 feet from ordinary high water or 7-1 slope from the bottom elevation of the stream system to the existing native vegetation, whichever is greater. The standard or degraded buffer area setback shall be shown on the approved site plan and if found to be in a degraded condition under the City functional assessment model, such degraded condition shall be subject to upgrade and restoration as follows: (i) manage and treat all storm water from the developed site and treat such water pursuant to the adopted storm water manual prior to discharge into the degraded area setback, (ii) removal of invasive weeds, debris and trash, and any blockage to longitudinal and/or lateral flow in the on-site stream section, (iii) restoration planting of natural vegetation appropriate to the site condition according to City guidelines.

f. Limitations and considerations:

i. For all new impervious surface in management zone:

(a) 1.5/1 habitat restoration contribution non-tree canopy.

(1) Management fund contribution $1.50 per square foot.

(b) 2/1 habitat restoration contribution for removal of tree canopy, charges based on cost of basin restoration plan.

(1) Management fund contribution $4.00 per square foot.

ii. For all new impervious surface in setback area(between standard and minimum setback referred to in Table E):

(a) 2-1 habitat restoration contribution.

(1) Management fund contribution $4.00 per square foot.

iii. Where 100 feet of existing natural vegetation is retained or degraded, vegetation is restored to naturally functioning conditions to a depth of 100 feet from the critical area edge,

a density bonus of 10 percent over otherwise allowable density in the district for the total project shall be allowed.

6. Skagit River Management Recommendations

a. Current Conditions:

i. Diked and managed along most city reaches (NE quadrant of the city is the exception).

ii. Significant batture areas within dike areas.

iii. Significant recreation and public access facilities existing.

iv. Much of downtown area already paved on top of or abutting dike system.

v. Water access to Skagit River limited outside of dike.

vi. Stream is "S".

vii. Wetlands are principally "II".

viii. Buffers are degraded and offer significant opportunity for restoration to improve all ecosystem functions for the river and the associated subbasins.

ix. This area provided the opportunity for a significant lift in the UGA water/wetland system function.

b. Management Zone: 200 feet (coincides with SMP).

i. Permitted uses and development standards (SMP controls) subject to the limitations noted herein.

c. Stream and associated wetland setbacks:

i. Standard setback outside (land side) of the dike existing impervious surface, 0.

ii. Standard setback where the dike does not exist, or where no impervious surface is present, 140 feet.

iii. Minimum setback outside the dike, 0.

iv. Minimum setback where no dike is present, 100 feet.

v. Minimum setback inside (water side) dike—100 feet except dike, transportation and utility crossings, water access, and water dependent uses—0

d. Limitations and considerations—outside dike system:

i. For all development within management zone—outside the dike:

(a) .25/1 habitat restoration contribution based upon total site area.

(1) Management fund contribution $.25 per square foot.

ii. For all new impervious surface development in the management zone—outside the dike:

(a) .5/1 habitat restoration contribution for all redeveloped impervious surface.

(1) Management fund contribution $.50 per square foot.

(b) 1.5/1 habitat restoration contribution, new impervious surface.

(1) Management fund contribution $1.50 per square foot.

(c) 2/1 habitat restoration contribution for removal of tree canopy.

(1) Management fund contribution $1.50 per square foot.

iii. For all new impervious surface in setback area:

(a) 2-1 habitat restoration contribution.

(1) Management fund contribution $4.00 per square foot.

(b) Shoreline works and structures within (water side) of the dike system.

(1) Management fund contribution $4.00 per square foot.

(c) Shoreline works where no dike is present.

(1) Mitigation banks—no charge.

(d) All impervious surface within the management zone but outside the minimum setback.

(1) Management fund contribution $1.00 per square foot.

(e) All impervious surface within the minimum setback.

(1) Management fund contribution $1.00 per square foot.

iv. For all new impervious surface inside the dike (except dike and associated structures):

(a) Management fund contribution $4.00 per square foot.

7. West Mount Vernon Management Recommendations

a. Conditions:

i. Flat, very little contour.

ii. No separate stream or river system.

iii. Urbanizing—no significant habitat patches.

b. Management Zone—200 feet

c. Standard setback (stream and associated wetlands).

i. F/NP, Cat. II wetlands (100 feet), minimum 50 percent.

ii. NS, Cat. III and IV wetlands (50 feet), minimum 50 percent.

d. Standard and Degraded Condition Restoration: Within the standard buffers, and within any degraded buffer area as defined below, the following conditions apply. Degraded buffer area is defined as follows: Except for S shorelines, where setback area is developed/degraded below the minimum setback noted above, the minimum setback to any impervious surface shall be to the edge of the existing undeveloped buffer, but not less than 15 feet from ordinary high water or 7-1 slope from the bottom elevation of the stream system to the existing native vegetation, whichever is greater. The standard or degraded buffer area setback shall be shown on the approved site plan and if found to be in a degraded condition under the City functional assessment model, such degraded condition shall be subject to upgrade and restoration as follows: (i) manage and treat all storm water from the developed site and treat such water pursuant to the adopted storm water manual prior to discharge into the degraded area setback, (ii) removal of invasive weeds, debris and trash, and any blockage to longitudinal and/or lateral flow in the on-site stream section, (iii) restoration planting of natural vegetation appropriate to the site condition according to City guidelines.

e. Limitations and considerations:

i. For all new impervious surface in management zone:

(a) 1/1 habitat restoration contribution non tree canopy.

(1) Management fund contribution $1.00 per square foot.

(b) 1/1 habitat restoration contribution for removal of tree canopy.

ii. For all new impervious surface in setback area:

(c) 2-1 habitat restoration contribution.

(1) Management fund contribution $2.00 per square foot.

8. Britt Slough Management Recommendations

a. Condition:

i. Degraded flood plain.

ii. Undeveloped.

b. Management Zone—200 feet.

c. Standard setback (stream and associated wetlands).

i. F/NP, Cat. II wetlands (100 feet), minimum 50 percent.

ii. NS, Cat. III and IV wetlands (50 feet), minimum 50 percent.

d. Standard and Degraded Condition Restoration: Within the standard buffers, and within any degraded buffer area as defined below, the following conditions apply. Degraded buffer area is defined as follows: Except for S shorelines, where setback area is developed/degraded below the minimum setback noted above, the minimum setback to any impervious surface shall be to the edge of the existing undeveloped buffer, but not less than 15 feet from ordinary high water or 7-1 slope from the bottom elevation of the stream system to the existing native vegetation, whichever is greater. The standard or degraded buffer area setback shall be shown on the approved site plan and if found to be in a degraded condition under the City functional assessment model, such degraded condition shall be subject to upgrade and restoration as follows: (i) manage and treat all storm water from the developed site and treat such water pursuant to the adopted storm water manual prior to discharge into the degraded area setback, (ii) removal of invasive weeds, debris and trash, and any blockage to longitudinal and/or lateral flow in the on-site stream section, (iii) restoration planting of natural vegetation appropriate to the site condition according to City guidelines.

e. Limitations and considerations:

i. For all new impervious surface in management zone:

(a) 1/1 habitat restoration contribution, non-tree canopy.

(1) Management fund contribution $1.00 per square foot.

(b) 1/1 habitat restoration contribution for removal of tree canopy.

(1) Management fund contribution $2.00 per square foot.

ii. For all new impervious surface in setback area:

(a) 2-1 habitat restoration contribution

(1) Management fund contribution $4.00 per square foot.

15.40.125 Candidate Sites and Implementation

A. Nine City parcels are identified in City of Mount Vernon as candidate sites for the Waters/Wetlands Reserve: See Appendix "B" attached. A Preliminary Basis of Design for Three Candidate Sites providing more than 21 acres of degraded lands for habitat restoration in Mount Vernon is described in Appendix "C." The City shall annually budget funds in the program to implement the overall program. The funds are restricted to programs which are shown to add restoration benefit under the Mount Vernon Functional Assessment Model. The mechanics of the model, and specific guidelines and programs shall be approved by resolution. The City may also pursue opportunities for land acquisition and or dedication to add to candidate sites where such properties are determined to add restoration benefit under the Mount

Vernon Functional Assessment Model. Mount Vernon is situated such that the areas provide the habitat benefits serving the City areas being developed to assure no net loss in function and value in the applicable basin or sub basin.

15.40.130 Reasonable Use Exceptions, Variances, and Appeals

A. Decision Authority. The City Hearing Examiner shall have the authority to hear and grant reasonable use exceptions and variances proposed by applicants, and to hear and decide appeals of Director decisions filed by parties of record.

B. Reasonable Use Exception. This process allows the city to determine if the application of the regulations would deny a reasonable use of property as defined in MVMC 15.40.170. Reasonable use shall be liberally construed to protect the constitutional property rights of the applicant.

1. Exception Request and Review Process. An application for a reasonable use exception shall be made to the city and shall include a critical area report, including mitigation plan, if necessary; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (Chapter 43.21C RCW) (SEPA documents). The Director shall prepare a recommendation to the Hearing Examiner based on review of the submitted information, a site inspection, and the proposal's ability to comply with reasonable use exception criteria in subsection (3).

2. Hearing Examiner Review. The Hearing Examiner shall review the application and conduct a public hearing pursuant to the provisions of MVMC 14.05.140. The Hearing Examiner shall approve, approve with conditions, or deny the request based on the proposal's ability to comply with all of the reasonable use exception review criteria in subsection (3).

3. Reasonable Use Review Criteria. All of the following criteria shall be met to grant the reasonable use exception:

a. The application of the critical area ordinance would deny all reasonable use of property;

b. There is no other reasonable use that would result in less impact on critical areas;

c. The proposed development does not pose an unreasonable threat to the public health and safety, or welfare, on or off the development site; and

d. Any alterations permitted to the critical area shall be the minimum necessary to allow for reasonable use of the property; and

e. The proposal is consistent with other applicable local, state, and federal regulations and standards.

D. Variances. An applicant may request a grant of relief from the requirements of this chapter to permit development in a manner not otherwise allowed by the standard regulations.

1. Variance Request and Review Process. An application for a variance shall be made to the city and shall include a critical area report, including mitigation plan, if necessary; and any other related project documents, such as permit applications to other agencies, special studies, and environmental documents prepared pursuant to the State Environmental Policy Act (Chapter 43.21C RCW) (SEPA documents). The Director shall prepare a recommendation to the hearing examiner based on review of the submitted information, a site inspection, and the proposal's ability to comply with variance criteria in subsection (3). The variance request shall be processed as a Type III Permit per MVMC 14.05.

2. Hearing Examiner Review. The Hearing Examiner shall review the application and conduct a public hearing pursuant to the provisions of MVMC 14.05. The Hearing Examiner shall approve, approve with conditions, or deny the request based on the proposal's ability to comply with all of the variance review criteria in subsection (3).

3. Variance. All of the following criteria shall be met to grant the variance:

a. The proposal is the minimum necessary to accommodate the proposed activity;

b. There is no other reasonable alternative to avoid impacting the critical area;

c. The proposed activities will not cause significant degradation of the critical area; and

d. The applicant has taken deliberate measures to minimize critical area impacts, including but not limited to the following:

i. Limiting the degree or magnitude of the activity; and

ii. Limiting the implementation of the activity; and

iii. Using appropriate and best available technology; and

iv. Taking affirmative steps to avoid or reduce impacts.

e. There will be no damage to nearby public or private property and no threat to the health or safety of people on or off the property; and

f. The proposed variance is based on consideration of the best available science as described in WAC 365-195-905; or where there is an absence of valid scientific information, the steps in MVMC 14.05.140 are followed. Appeals of the Hearing Examiner's decision shall follow the steps in MVMC 14.05.270 Judicial Appeals.

E. Appeals. This subsection allows a process to appeal administrative interpretations and decisions made by the Director.

1. Who May Appeal. Any person aggrieved by a decision of the city regarding an administrative determination or a permit issued, denied, or conditioned pursuant to this chapter may appeal that decision to the Hearing Examiner.

2. Merger of Hearings. If the matter which is the subject of the appeal requires a development permit which also requires a hearing before the hearing examiner, both the appeal and the development permit may be combined in a single hearing.

3. Submittal Requirements and Standards of Review. See MVMC 14.05.

15.40.135 NONCONFORMING USES AND STRUCTURES

Where a structure or land use is nonconforming under the provisions of MVMC 15.40.120, such structure or use may be continued, and may be modified, enlarged or expanded under the provisions of MVMC 17.102.010 et sec. with the following additional condition: The application for a change shall be accompanied by a habitat report as required by section 15.40.090(D). Any approval shall require a written finding that the mitigation associated with the change shall have full mitigated any incremental impacts to affected critical area functions and values under the Best Available Science guidelines applicable to the affected Critical area. The application and permit review shall conform to the requirements in MVMC 14.05 and shall proceed as a Type III permit.

15.40.140 Vesting

A. An application for a development permit, to be processed under the city development regulation or the Shoreline Management Master Program, vests at such time as a complete application is filed with the Planning and Permit Center and all required permit fees are paid. An application is "complete" on the date a complete application is filed, as subsequently determined in the letter of completeness issued pursuant to MVMC 14.05.100. An application vested under this Subsection is not subject to any laws or regulations which become effective after the date of vesting, except as provided below.

B. If a permit application vested under subsection (1) of this section is approved, and that permit approval contemplates one or more future uses or permits on the property that are subject to that permit approval, then:

1. If the permit approval contains a detailed description of the uses, including a detailed site plan drawn to scale, specifying the location of all buildings and improvements to be constructed in conjunction with the use(s), and such site plan is consistent with all laws and regulations in effect at the time the original application vested, then all permit applications in connection with the future use(s) are vested to the laws and regulations in effect at the time of the vesting of the original permit application, and laws and regulations enacted after that vesting date shall not apply to the future use(s) or any permit applications filed in connection therewith;

2. If the development approval does not describe in detail all future uses or does not contain a detailed site plan, drawn to scale, specifying the location of all buildings and improvements to be constructed in conjunction with the future use(s), then the future use(s) shall be subject to all later enacted laws and regulations in effect at the time of the vesting of any required application for permits in connection with the future use(s).

Subject to the provisions of subsection (4) of this section, it is the intention of this subsection that, consistent with other federal, state, and county regulatory requirements, an applicant be able to vest his future development rights to the level of detail the applicant chooses to show in the application documents.

C. Nothing herein shall be construed to restrict the city from imposing conditions on development permits pursuant to the State Environmental Policy Act, Chapter 43.21C RCW, Chapter 197-11 WAC and Chapter 14.12 SCC, as long as such conditions do not change any of the requirements of the underlying code section pertinent to the particular development permit.

D. Nothing herein shall be construed to prevent the city from imposing new regulations necessary to protect the public health and safety, including, but not limited to, the requirements of the building, health, and fire codes, as now adopted or as subsequently amended.

E. Applications for rezones and Comprehensive Plan amendments are not subject to the vesting rules in this section.

15.40.150 Enforcement

The provisions set forth in this section shall apply to all violations of this chapter. Penalty and enforcement provided herein shall not be deemed exclusive, and the city may pursue any appropriate remedy or relief.

A. Fines. Any person, firm, corporation, or association or any agent thereof who violates any of the provisions of this chapter shall be guilty of a misdemeanor punishable by a fine not to exceed $1,000. It shall be a separate offense for each and every day or portion thereof during which any violation of any provisions of this chapter is committed.

B. Damages. Any person, firm, corporation, or association or any agent thereof who violates any of the provisions of this chapter shall be liable for all damages to public or private property arising from such violation, including the cost of restoring the affected area to an equivalent or improved condition prior to the violation.

C. Restorations. Restoration shall include but not be limited to the replacement of all improperly removed ground cover with species similar to those which were removed or other approved species such that the biological and habitat values will be replaced to the greatest extent possible. Studies by qualified experts shall be conducted to determine the conditions which were likely to exist on the lot prior to the illegal alteration. Restoration shall also include installation and maintenance of interim and emergency erosion control measures until such time as the restored site complies with city requirements.

D. Stop Work Orders. The city shall stop work on any existing permits and halt the issuance of any or all future permits or approvals for any activity which violates the provisions of this chapter and all penalties are paid in full.

15.40.160 Maps

A. The city's critical area reference maps are listed below as reference points only. The maps may be superseded by information generated as described in section (B).

1. Aquifer Recharge Areas: Plate 7 Land Cover Class/LandSAT Image 1998 contained in the Jones & Stokes. March 2004. City of Mount Vernon Draft Issue and Options: Critical Areas Regulations Update. Prepared for the City of Mount Vernon, Washington

2. Geologic Hazard Areas:

a. Plate 4 Surficial Geology, contained in the Jones & Stokes. March 2004. City of Mount Vernon Draft Issue and Options: Critical Areas Regulations Update. Prepared for the City of Mount Vernon. Bellevue, Washington, based upon Washington State Department of Natural Resources data.

b. Plate 5 Steep Slopes and Alluvium, contained in the Jones & Stokes. March 2004. City of Mount Vernon Draft Issue and Options: Critical Areas Regulations Update. Prepared for the City of Mount Vernon. Bellevue, Washington, based on a topographic map and an unpublished master's thesis and the Skagit County Alluvial Fan Study Orthophoto Maps (alluvial fans).

c. Plate 6. Soil Liquefaction Potential, contained in the Jones & Stokes. March 2004. City of Mount Vernon Draft Issue and Options: Critical Areas Regulations Update. Prepared for the City of Mount Vernon. Bellevue, Washington, based upon Washington State Department of Natural Resources data, Hazard Mitigation Grant Program.

3. Habitat Conservation Areas: State of Washington Department of Fish and Wildlife, Priority Habitats and Species (PHS) Maps and Digital Data.

4. Streams:

a. Shannon and Wilson, Inc., 2003. Inventory and Evaluation of Streams and Riparian Habitats of Mount Vernon, Washington. Final City Staff Review Report, December 2003.

b. For areas unaddressed by the mapping in D.1, Washington State Department of Natural Resources, Water Typing Maps. 5. Wetlands:

a. Shannon and Wilson, January 2000. Wetland and Stream Inventory, City of Mount Vernon and Urban Growth Area.

b. National Wetland Inventory Maps, U.S. Department of the Interior,

B. The exact boundary of each critical area depicted on maps referenced herein is approximate and is intended only to provide an indication of the presence of a critical area on a particular site. It is recognized that not all critical areas are mapped. The lack of inclusion of a critical area on a map shall not relieve an applicant, project sponsor, or property owner from compliance with these critical area regulations. The inclusion of a critical area on the city maps shall be advisory, and if critical areas are not in fact present, the maps may be amended upon city acceptance of reclassification requests or new data in accordance with any specific procedures or criteria herein. The applicability of these regulations shall be based upon the classification criteria for each critical area and the actual presence of critical areas on or in the vicinity of subject properties.

15.40.170 Definitions

A. Land Cover Definitions:

AQUATIC AREAS: Areas which are classified as regulated streams and regulated wetlands.

IMPERVIOUS SURFACES:

1. For the purposes of the stream and wetland regulations: A hard surface area that either prevents or retards the infiltration of water into the soil and monument of water through soil media. Common impervious surfaces include, but are not limited to, roof tops, walkways, patios, driveways, parking lots or storage areas, concrete or asphalt paving, gravel roads, lawns, and oiled, macadam or other surfaces which impede the natural infiltration and movement of water. When such surfaces supported a permitted use on or before January 1, 2007 they shall be considered impervious surfaces. Earthwork (e.g., grading, filling, clearing preparatory to new development) does not create impervious surface.

2. For the purposes of aquifer protection regulations:

a. Impervious surfaces include those that have a lesser permeability than the undisturbed native soil, as indicated in Table 14 of the Soil Survey of Skagit County Area, Washington (USDA Soil conservation Service, 1989).

b. Effective impervious surfaces are those impervious surfaces that are connected via sheet flow or discrete conveyance to a drainage system. Impervious surfaces on residential development sites are considered ineffective if the runoff is dispersed in accordance with "Full Dispersion" measures as described in Chapter 5 of Volume V, Stormwater Management Manual for Western Washington, February 2005, or an equivalent manual as determined by the Director.

PERVIOUS SURFACES: Vegetated areas that do not meet the definition of tree cover.

TREE COVER: The area of cover provided by conifer or hardwood tree(s) greater than 4 inches dbh (diameter at breast height). Tree cover excludes the portion of the canopy that overlies impervious surface areas.

B. General Definitions.

ACTIVITIES, DEVELOPMENT: The construction, reconstruction, conversion, structural alteration, relocation or enlargement of any structure; any mining, excavation, landfill or land disturbance; division of a parcel of land into two or more parcels; and any use or extension of the use of land.

ALTERATION: Any human induced change in an existing condition of a critical area or its management zone or buffer. Alterations include, but are not limited to grading, filling, channelizing, dredging, clearing (vegetation), construction, compaction, excavation, drainage or dewatering, or any other activity that changes the character of the critical area.

ALLUVIAL FAN HAZARD: Flooding occurring on the surface of an alluvial fan or similar landform which originates at the apex and is characterized by high-velocity flows; active processes of erosion, sediment transport, and deposition; and unpredictable flow paths.

AQUIFER: A geological formation, group of formations, or part of a formation that is capable of yielding a significant amount of water to a well or spring.

ARTIFICIAL CHANNEL: A stream channel that is entirely constructed but does not include relocated natural channels. Except where fish bearing, an artificial channel is not a critical area.

BEST MANAGEMENT PRACTICES (BMPS): Conservation practices or systems of practices and management measures that:

1. Control soil loss and reduce water quality degradation caused by high concentrations of nutrients, animal waste, toxics, and sediment;

2. Minimize adverse impacts to surface water and ground water flow and circulation patterns and to the chemical, physical, and biological characteristics of wetlands;

3. Protect trees and vegetation designated to be retained during and following site construction and use native plant species appropriate to the site for re-vegetation of disturbed areas; and

4. Provide standards for proper use of chemical herbicides within critical areas.

BUFFER: An area that is contiguous to and protects a critical area which is required for the continued maintenance, functioning, and/or structural stability of a critical area.

CERTIFIED PROFESSIONAL: Any person with the education, experience, and/or professional certification or licenses in a specialized field of study appropriate to the studies and analysis required, such as a wildlife biologist, hydrologist, hydrogeologist, wetland biologist, geotechnical engineer, or other discipline.

CRITICAL AREAS: Wetlands, aquifer protection areas, fish and wildlife habitat, frequently flooded and geologically hazardous areas as defined by the Growth Management Act.

CRITICAL FACILITY: A facility for which even a slight chance of flooding, inundation, or impact from a hazard event might be too great. Critical facilities include, but are not limited to, schools, nursing homes, hospitals, police, fire and emergency response installations, and installations that produce, use, or store hazardous materials or hazardous waste.

DBH: Diameter breast height, which means the outside bark diameter at breast height. Breast height is defined as 4.5 feet (1.37m) above the ground on the uphill side of the tree.

DEVELOPMENT PERMIT: Written permission after appropriate review for type of application from the appropriate decision-maker authorizing the division of a parcel of land, the construction, reconstruction, conversion, structural alteration, relocation or enlargement of any structure, utility, or any use or extension of the use of the land.

DIRECTOR: The Director of Community and Economic Development for the City of Mount Vernon, or his/her designee.

DRAINAGE COLLECTION SYSTEM: A system for conveying, treating and detaining storm water runoff swales, ponds, and outfalls.

EMERGENCY: An action that must be undertaken immediately or within a time frame too short to allow full compliance with this chapter, to avoid an immediate threat to public health or safety, to prevent an imminent danger to public or private property, or to prevent an imminent threat of serious environmental degradation.

FORESTED AREA: A treed area which functions, or which over time will be restored to function, as a mature forest characterized by an undisturbed understory.

GEOLOGICALLY HAZARDOUS AREAS: Those areas that, because of their susceptibility to erosion, sliding, earthquake, or other geological events, pose a threat to the health and safety of citizens when incompatible development is sited in areas of significant hazard. Such incompatible development may not only place itself at risk, but also may increase the hazard to surrounding development and use. Areas susceptible to one or more of the following types of hazards shall be designated as a geologically hazardous area:

1. Erosion hazard;
2. Landslide hazard;
3. Seismic hazard;
4. Volcanic hazard; and
5. Alluvial Fan Hazard.

INNOVATIVE SITE DESIGN; development techniques for development using creative approaches to site design, habitat and tree retention, significant reduction of impervious surfaces, changes in traditional site features such as roads and structures in favor of natural habitat features which result in zero or near-zero drainage discharge from the site after development.

INTERMITTENT: Water is not present in the channel year round during years of normal or above normal rainfall.

ORDINARY HIGH WATER MARK: On lakes and streams, that mark found by examining the bed and banks and ascertaining where the presence and action of waters are so common and usual, and so long continued in all ordinary years, as to mark upon the soil a character distinct from that of the abutting upland, in respect to vegetation as that condition exists as of the effective date of regulations, as it may naturally change thereafter, or as it may change in accordance with permits issued by the city or state. Where the ordinary high water mark cannot be found, it shall be the stage of the 50 percent exceedance flow, according to the period of record of a measured or synthetic hydrograph. For braided streams, the ordinary high water mark is found on the banks forming the outer limits of the depression within which the braiding occurs.

NORMAL RAINFALL: Rainfall that is at the mean or within one standard deviation of the mean of the accumulated annual rainfall record, based upon the water year for Skagit County as recorded at the Burlington/Mount Vernon, Skagit Regional Airport, WA, United States.

PERENNIAL: Waters which flow continuously.

PRIMARY ASSOCIATION AREA: The area used on a regular basis by, is in close association with, or is necessary for the proper functioning of the habitat of a critical species. Regular basis means that the habitat area is normally, or usually known to contain a critical species, or based on known habitat requirements of the species, the area is likely to contain the critical species. Regular basis is species and population dependent. Species that exist in low numbers may be present infrequently yet rely on certain habitat types.

PRIORITY HABITAT: Habitat type or elements with unique or significant value to one or more species as classified by the state Department of Fish and Wildlife. A priority habitat may consist of a unique vegetation type or dominant plant species, a described successional stage, or a specific structural element.

REASONABLE USE: The minimum use to which a property owner is entitled under the applicable state and federal constitutional provisions, including takings and substantive due process. Reasonable use shall be liberally construed to protect the constitutional property rights of the applicant.

REGULATED ACTIVITY: All activities located within a regulated critical area or critical area buffer/management zone.

RIPARIAN AREA: The upland area immediately adjacent to and paralleling a body of water and is usually composed of trees, shrubs and other plants. Riparian functions include bank and channel stability, sustained water supply, flood storage, recruitment of woody debris, leaf litter, nutrients, sediment and pollutant filtering, shade, shelter, and other functions that are important to both fish and wildlife.

STEEP SLOPES: Slopes greater than 40 percent.

SALMONID MIGRATION BARRIER: An in-stream blockage that consists of a natural drop (no human influence) with an uninterrupted slope greater than 100-percent (45 degree angle) and a height in excess of 11 vertical feet within anadromous salmon-bearing waters or a height in excess of 3 vertical feet within resident trout only bearing waters. Constructed barriers to salmonid migration (e.g., culverts, weirs, etc.) shall be considered barriers to salmonid migration by this definition, only if they were lawfully installed;

present a complete barrier to salmonid passage based on hydraulic drop, water velocity, water depth, or any other feature which would prevent all salmonid from passing upstream; and in the opinion of the City Reviewing Official cannot be modified to provide salmonid passage without resulting any of the following conditions:

1. Significant impacts to other environmental resources;

2. Significant impacts to major transportation and utility systems, or to the public health and safety;

3. Significant expense. For the purposes of this definition significant expense means a cost equal to or greater than 50 percent of the combined value of the proposed site buildings, structures, and/or site improvements, and existing buildings, structures, and/or site improvements to be retained.

SPECIES, PRIORITY: Any fish or wildlife species requiring protective measures and/or management guidelines to ensure their persistence as genetically viable population levels as classified by the Washington Department of Fish and Wildlife, including endangered, threatened, sensitive, candidate and monitor species, and those of recreational, commercial, or tribal importance.

STREAM: An area where surface waters flow sufficiently to produce a defined channel or bed. A defined channel or bed is an area which demonstrates clear evidence of the passage of water and includes but is not limited to bedrock channels, gravel beds, sand and silt beds, and defined channel swales. The channel or bed need not contain water year-round. This definition is not meant to include irrigation ditches, canals, storm or surface water runoff devices or other entirely artificial watercourses unless they are used by salmonids or used to convey streams naturally occurring prior to construction of such watercourses.

UTILITIES: Utility lines and facilities related to the provision, distribution, collection, transmission or disposal of water, storm and sanitary sewage, oil, gas, power, and telephone cable, and includes facilities for the generation of electricity.

WETLANDS: Those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation adapted for life in saturated soil conditions. Wetlands generally include swamps, marshes, bogs, and similar areas. Wetlands do not include those artificial wetlands intentionally created from non-wetland sites, including, but not limited to, irrigation and drainage ditches, grass-lined swales, canals, detention facilities, wastewater treatment facilities, farm ponds, and landscape amenities, or those wetlands created after July 1, 1990, that were unintentionally created as a result of the construction of a road, street, or highway. Wetlands do include those artificial wetlands intentionally created from non-wetland areas to mitigate the conversion of wetlands.

C. Report Content Requirements

GEOTECHNICAL STUDY: A study prepared in accordance with generally accepted geotechnical practices and stamped by a professional engineer licensed in the State of Washington which includes soils and slope stability analysis, boring and test pit logs, and recommendations on slope setbacks, foundation design, retaining wall design, material selection, and all other pertinent elements. If the evaluation involves geologic evaluations or interpretations, the report shall be reviewed and approved by a geologist. Further recommendations, additions or exceptions to the original report based on the plans, site conditions, or other supporting data shall be signed and sealed by the geotechnical engineer. If the geotechnical engineer who reviews the plans and specifications is not the same engineer who prepared the geotechnical report, the new engineer shall in a letter to the city accompanying the plans and specifications, express his or her agreement or disagreement with the recommendations in the geotechnical report and state that the plans and specifications conform to his or her recommendations. The preparation and content requirements in the table below shall also apply.

15.40.160 Table A – Geotechnical Report – Detailed Requirements

Report Preparation/Content Requirements	Erosion	Landslide	Seismic	Volcanic Hazards	Alluvial Fan
1. Characterize soils, geology and drainage.	X	X	X	X	X
2. Describe and depict all natural and man-made features within 200 feet of the site boundary.	X	X	X	X	X
3. Identify any areas that have previously been disturbed or degraded by human activity or natural processes.	X	X	X	X	X
4. Characterize ground water conditions including the presence of any public or private wells within 1,000 feet of the site.	X	X	X		X
5. Provide a site evaluation review of available information regarding the site.	X	X	X	X	X
6. Conduct a surface reconnaissance of the site and adjacent areas.	X	X	X		X
7. Conduct a subsurface exploration of soils and hydrologic conditions.	X	X	X		X
8. Provide a slope stability analysis.	X	X			X
9. Address principles of erosion control in proposal design including: Plan the development to fit the topography, drainage patterns, soils and natural vegetation on site; Minimize the extent of the area exposed at one time and the duration of the exposure; Stabilize and protect disturbed areas as soon as possible; Keep runoff velocities low; Protect disturbed areas from storm water runoff; Retain the sediment within the site area; Design a thorough maintenance and follow-up inspection program to ensure erosion control practices are effective.	X	X			X
10. Provide an evaluation of site response and liquefaction potential relative to the proposed development.			X		
11. Conduct sufficient subsurface exploration to provide a site coefficient (S) for use in the adopted Building Code to the satisfaction of the Building Official.			X		
12. Provide an analysis of proposed clearing, grading and construction activities including construction scheduling. Analyze potential direct and indirect on-site and off-site impacts from development.	X	X	X		X
13. Propose mitigation measures, such as any special construction techniques, monitoring or inspection programs, erosion or sedimentation programs during and after construction, surface water management controls, buffers, remediation, stabilization, etc.	X	X	X	X	X
14. Critical facilities on sites containing areas susceptible to inundation due to volcanic hazards shall require an evacuation and emergency management plan. The applicant for critical facilities shall evaluate the risk of inundation or flooding resulting from mudflows originating on Mount Baker in a geotechnical report, and identify any engineering or other mitigation measures as appropriate.				X	

Note: An "X" indicates that the requirement applies in the identified critical area.

HABITAT/WILDLIFE ASSESSMENT: A report prepared by a qualified fish and wildlife biologist with experience assessing the relevant species and habitats and including at a minimum, the following requirements:

1. Site Plan prepared in accordance with the requirements of the Planning and Permit Center indicating all Habitat Conservation Areas falling within 200 feet of the subject property.

2. Project narrative describing the proposal including, but not limited to, associated grading and filling, structures, utilities, adjacent land uses, description of vegetation both within and adjacent to the habitat conservation area, and when deemed necessary by the Director, surface and subsurface hydrologic analysis;

3. Impact analysis identifying and documenting the presence of all habitat conservation areas and discussing the project's effects on the Habitat Conservation Areas;

4. Regulatory analysis including a discussion of any federal, state, tribal, and/or local requirements or special management recommendations which have been developed for species and/or habitats located on the site;

5. Mitigation report including a discussion of proposed measures of mitigating adverse impacts of the project and an evaluation of their potential effectiveness. Measures may include but are not limited to: establishment of buffer zones, preservation of critically important plants and trees, limitation of access to habitat areas, seasonal restrictions of construction activities, establishment of a timetable for periodic review of the plan and/or establishment of performance or maintenance bonds;

6. Management and maintenance practices including a discussion of ongoing maintenance practices that will assure protection of all fish and wildlife habitat conservation areas onsite after the project has been completed. This section should include a discussion of proposed monitoring criteria, methods and schedule.

HYDROGEOLOGIC STUDY: A report shall be prepared as follows:

1. The study shall be prepared by, or under the direction of, and signed by licensed hydrogeologist pursuant to WAC 308-15.

2. Phase I Report Requirements. A Phase 1 reconnaissance level hydrogeologic report shall summarize existing information about the basic site hydrogeologic conditions such as soil types, land cover, likely ground water flow directions and receiving waters, and which low impact development management practices will be implemented consistent with the Low Impact Development Technical Guidance Manual for Puget Sound, January 2005, or an equivalent manual as determined by the Director.

3. Phase II Report Requirements. This report shall include:

a. A description of the geology and ground water in the proposed permit area and adjacent areas down to and including the lowest aquifer that may be affected by the facility, including the following:

i. The results of a sufficient number of test borings and core borings to accurately characterize geology, soils, ground water flow, ground water chemistry and flow systems of the proposed permit area and adjacent area, which shall be at least three test borings. The applicant shall include the actual surface elevations of the drill holes.

ii. The stratigraphy, lithologic and physical characteristics and thickness of each stratum, including the location and depth of aquifers.

iii. The hydrologic characteristics of each aquifer described in paragraph "ii" above, including field test data for hydraulic conductivity, storage coefficient and transmissivity, ground water hydraulic gradient and velocity. The description of these characteristics shall be based on a multiple well aquifer tests if required by the city. The application shall include the procedures and calculations used to determine these characteristics.

iv. The geologic structure within the proposed permit area and adjacent area, and its relation to the regional geological structure.

v. The aquifer characteristics necessary to accurately describe three dimensional ground water flow through the proposed permit area and adjacent area, including storage and discharge characteristics.

STREAM STUDY, STANDARD: A report shall be prepared by a qualified professional, unless otherwise determined by the Director, and include the following information:

1. Site Map: Site map(s) indicating, at a scale no smaller than 1" = 20' (unless otherwise approved by the Director):

a. The entire parcel of land owned by the applicant, including 100 feet of the abutting parcels through which the water body(ies) flow(s);

b. The ordinary high water mark (OHWM) determined in the field by a certified professional (the OHWM must also be flagged in the field);

c. Stream classification, as recorded in city Inventories (if unclassified, see subsection (c) below);

d. Topography of the site and abutting lands in relation to the stream(s) and its/their management zone(s) at contour intervals of two feet where slopes are less than 10 percent, and of five feet where slopes are 10 percent or greater;

e. 100-year floodplain and floodway boundaries, including 100 feet of the abutting parcels through which the water body(ies) flow(s);

f. Site drainage patterns, using arrows to indicate the direction of major drainage flow;

g. Top view and typical cross-section views of the stream, banks, and management zones to scale;

h. The vegetative cover of the entire site, including the stream or lake, banks, riparian area, and/or abutting wetland areas, extending 100 feet upstream and downstream from the property line. Include position, species, and size of all trees at least 4 inches dbh that are within the Inner and Outer Riparian Management Zone;

i. The location, width, depth, and length of all existing and proposed structures, roads, storm water management facilities, wastewater treatment and installations in relation to the stream/lake and its/their management zones; and

j. Location of site access, ingress and egress.

2. Grading Plan: A grading plan prepared in accordance with MVMC and Mount Vernon Engineering Standards and as required by staff through the preapplication review process, and showing contour intervals of two feet where slopes are less than 10 percent, and of five feet where slopes are 10 percent or greater.

3. Stream Assessment Narrative: A narrative report shall be prepared to accompany the site plan which describes:

a. The Stream classification as recorded in city inventories.

b. The vegetative cover of the site, including the stream or lake, banks, riparian area, wetland areas, and flood hazard areas extending 100 feet upstream and downstream from the property line;

c. The ecological functions currently provided by the stream/lake and existing riparian area;

d. Observed or reported fish and wildlife that make use of the area including, but not limited to, salmonids, mammals, and bird nesting, breeding, and feeding/foraging areas; and

e. Measures to protect trees and vegetation.

STREAM STUDY, SUPPLEMENTAL: The application shall include the following information:

1. Unclassified Stream Assessment: If the site contains an unclassified stream, a certified professional shall provide a proposed classification of the stream(s) based on the city's adopted rating system in MVMC 15.40.110(A)(1) and a rationale for the proposed rating.

2. Alterations to Stream and/or Management Zones: A supplemental report prepared by a certified professional shall evaluate alternative methods of developing the property using the following criteria for justification:

a. Avoid any disturbances to the stream or management zone;

b. Minimize any stream or management zone impacts;

c. Compensate for any stream or management zone impacts;

d. Restore any stream or management zone area impacted or lost temporarily;

e. Enhance degraded stream habitat to compensate for lost functions and values.

3. Impact Evaluation:

a. An impact evaluation for any unavoidable impacts prepared by a certified professional, to include:

i. Identification, by characteristics and quantity, of the resources (stream, lake) and corresponding functional values found on the site;

ii. Evaluation of alternative locations, design modifications, or alternative methods of development to determine which option(s) reduce(s) the impacts on the identified resource(s) and functional values of the site;

iii. Determination of the alternative that best meets the applicable approval criteria and identify significant detrimental impacts that are unavoidable;

iv. To the extent that the site resources and functional values are part of a larger natural system such as a watershed, the evaluation must also consider the cumulative impacts on that system;

b. For a violation, the impact evaluation must also include:

i. Description, by characteristics and quantity, of the resource(s) and functional values, on the site prior to the violations, including, but not limited to: shade/temperature regulation, input of organic material and nutrients, contribution of large woody debris (LWD), improvements to water quality, bank stabilization, wildlife habitat, microclimate, and·ground water; and

ii. Determination of the impact of the violation on the resource(s) and functional values.

STREAM MITIGATION PLAN: The mitigation plan must ensure compensation for unavoidable significant adverse impacts that result from the chosen development alternative or from a violation as identified in the impact evaluation. A mitigation plan must include:

1. Site Map: Site map(s) indicating, at a scale no smaller than 1” = 20' (unless otherwise approved by the Director):

a. The entire parcel of land owned by the applicant, including 100 feet of the abutting parcels through which the water body(ies) flow(s);

b. The ordinary high water mark (OHWM) determined in the field by a certified professional (the OHWM must also be flagged in the field);

c. Stream classification, as recorded in City Inventories or as determined through a Supplemental Stream Study approved by the Director;

d. Topography of the site and abutting lands in relation to the stream(s) and its/their management zones at contour intervals of two feet where slopes are less than 10 percent, and of five feet where slopes are 10 percent or greater;

e. 100-year floodplain and floodway boundaries, including 100 feet of the abutting parcels through which the water body(ies) flow(s);

f. Site drainage patterns, using arrows to indicate the direction of major drainage flow;

g. Top view and typical cross-section views of the stream, banks, and management zones to scale;

h. The vegetative cover of the entire site, including the stream or lake, banks, riparian area, and/or abutting wetland areas, extending 100 feet upstream and downstream from the property line. Include position, species, and size of all trees at least 4 inches dbh that are within the Inner and Outer Riparian Management Zones;

i. The location, width, depth, and length of all existing and proposed structures, roads, storm water management facilities, wastewater treatment and installations in relation to the stream/lake and its/their management zones; and

j. Location of site access, ingress and egress;

k. Indication of where proposed mitigation or remediation measures will take place on the site;

l. Separate indication of areas where revegetation is to take place and areas where vegetation is anticipated to be removed; and

m. Any other areas of impact with clear indication of type and extent of impact indicated on site plan.

2. Mitigation narrative that includes the following elements:

a. Description of existing conditions on the site and associated water resource (baseline information);

b. Resource(s) and functional values to be restored, created, or enhanced on the mitigation site(s);

c. Documentation of coordination with appropriate local, regional, special district, state, and federal regulatory agencies;

d. Construction schedule;

e. Operations and maintenance practices for protection and maintenance of the site;

f. Environmental goals, objectives, and performance standards to be achieved by mitigation;

g. Monitoring and evaluation procedures for a 3-year period minimum, including minimum monitoring standards and timelines (i.e., annual, semi-annual, quarterly);

h. Contingency plan with remedial actions for unsuccessful mitigation;

i. Cost estimates for implementation of mitigation plan for purposes of calculating surety device; and

j. Discussion of compliance with approval criteria.

k. A review of the best available science supporting the proposed request for a reduced standard and/or the method of impact mitigation; a description of the report author's experience to date in restoring or creating the type of critical area proposed; and an analysis of the likelihood of success of the compensation project.

WETLAND ASSESSMENT: A wetland assessment includes the following:

1. A description of the project and maps at a scale no smaller than1" = 200′ showing the entire parcel of land owned by the applicant and the wetland boundary delineated by a qualified wetlands ecologist, and pursuant to MVMC 15.40.040;

2. A description of the vegetative cover of the wetland and adjacent area including identification of the dominant plant and animal species, consistent with published delineation standards (Corps of Engineers delineation manual, 1987; Washington State Wetlands Identification and Delineation Manual, 1997). Copies of the wetland delineation data sheets and rating forms should be included as an appendix to the wetland assessment;

3. A site plan for the proposed activity at a scale no smaller than 1" = 200′ showing the location, width, depth and length of all existing and proposed structures, roads, storm water management facilities, sewage treatment and installations within the wetland and its buffer;

4. The exact locations and specifications for all activities associated with site development including the type, extent and method of operations;

5. Elevations of the site and adjacent lands within the wetland and its buffer at contour intervals of no greater than five feet or at a contour interval appropriate to the site topography and acceptable to the city;

6. Top view and typical cross-section views of the wetland and its buffer to scale;

7. The purposes of the project and, if a variance is being requested, an explanation of why the proposed activity cannot be located at another site;

8. If wetland mitigation is proposed, a mitigation plan which includes baseline information, an identification of direct and indirect impacts of the project to the wetland area and wetland functions, environmental goals and objectives, performance standards, construction plans, a monitoring program and a contingency plan.

9. Alternative Methods of Development: If wetland changes are proposed, the applicant shall evaluate alternative methods of developing the property using the following criteria in this order:

a. Avoid any disturbances to the wetland or buffer;

b. Minimize any wetland or buffer impacts;

c. Compensate for any wetland or buffer impacts;

d. Restore any wetlands or buffer impacted or lost temporarily;

e. Create new wetlands and buffers for those lost; and

f. In addition to restoring a wetland or creating a wetland, enhance an existing degraded wetland to compensate for lost functions and values.

This evaluation shall be submitted to the Director. Any proposed alteration of wetlands shall be evaluated by the Director using the above hierarchy.

10. Such other information as may be needed by the city, including but not limited to an assessment of wetland functional characteristics, including a discussion of the methodology used; a study of hazards if present on site, the effect of any protective measures that might be taken to reduce such hazards; and any other information deemed necessary to verify compliance with the provisions of this section.

WETLAND MITIGATION PLAN – PRELIMINARY: A preliminary wetland mitigation plan shall include the following:

1. A conceptual site plan demonstrating sufficient area for replacement ratios;

2. Proposed planting scheme for created, restored, and enhanced wetlands; and

3. Written report consistent with final wetland mitigation plan requirements regarding baseline information, environmental goals and objectives, and performance standards.

WETLAND MITIGATION PLAN – FINAL: A final wetland mitigation plan shall include:

1. Baseline Information: A written assessment and accompanying maps of the impacted wetland including, at a minimum, a wetland delineation by a qualified wetland specialist; existing wetland acreage; vegetative, faunal and hydrologic characteristics; an identification of direct and indirect impacts of the project to the wetland area and wetland functions; soil and substrata conditions; topographic elevations and compensation site. If the mitigation site is different from the impacted

wetland site, the assessment should include at a minimum: existing acreage; vegetative, faunal and hydrologic conditions; relationship within the watershed and to existing water bodies; soil and substrata conditions, topographic elevations; existing and proposed adjacent site conditions; buffers; and ownership.

2. Environmental Goals and Objectives: A written report by a qualified wetland specialist shall be provided identifying goals and objectives of the mitigation plan and describing:

a. The purposes of the compensation measures including a description of site selection criteria, identification of compensation goals; identification of target evaluation species and resource functions, dates for beginning and completion, and a complete description of the structure and functional relationships sought in the new wetland. The goals and objectives shall be related to the functions and values of the original wetland or if out-of-kind, the type of wetland to be emulated; and

b. A review of the best available science and report author's experience to date in restoring or creating the type of wetland proposed shall be provided. An analysis of the likelihood of success of the compensation project at duplicating the original wetland shall be provided based on the experiences of comparable projects, preferably those in the same drainage basins, if any. An analysis of the likelihood of persistence of the created or restored wetland shall be provided based on such factors as surface and ground water supply and flow patterns, dynamics of the wetland ecosystem; sediment or pollutant influx and/or erosion, periodic flooding and drought, etc., presence of invasive flora or fauna, potential human or animal disturbance, and previous comparable projects, if any.

3. Performance Standards: Specific criteria shall be provided for evaluating whether or not the goals and objectives of the project are achieved and for beginning remedial action or contingency measures. Such criteria may include water quality standards, survival rates of planted vegetation, species abundance and diversity targets, habitat diversity indices, or other ecological, geological or hydrological criteria. These criteria will be evaluated and reported pursuant to subsection (5) of this definition, Monitoring Program. An assessment of the project's success in achieving the goals and objectives of the mitigation plan should be included along with an evaluation of the need for remedial action or contingency measures.

4. Detailed Techniques and Plans: Written specifications and descriptions of compensation techniques shall be provided including the proposed construction sequence, grading and excavation details, erosion and sediment control features needed for wetland construction and long-term survival, a planting plan specifying plant species, quantities, locations, size, spacing, and density; source of plant materials, propagates, or seeds; water and nutrient requirements for planting; where appropriate, measures to protect plants from predation; specification of substrata stockpiling techniques and planting instructions; descriptions of water control structures and water level maintenance practices needed to achieve the necessary hydroperiod characteristics; etc. These written specifications shall be accompanied by detailed site diagrams, scaled cross-sectional drawings, and topographic maps showing slope percentage and final grade elevations, and any other drawings appropriate to show construction techniques or anticipated final outcome. The plan shall provide for elevations which are appropriate for the desired habitat type(s) and which provide sufficient hydrologic data. The city may request such other information as needed to determine the adequacy of a mitigation plan.

5. Monitoring Program: A program outlining the approach for monitoring construction and development of the compensation project and for assessing a completed project shall be provided in the mitigation plan. Monitoring may include, but is not limited to:

a. Establishing vegetation plots to track changes in plant species composition and density over time;

b. Using photo stations to evaluate vegetation community response;

c. Sampling surface and subsurface waters to determine pollutant loading, and changes from the natural variability of background conditions (pH, nutrients, heavy metals);

d. Measuring base flow rates and storm water runoff to model and evaluate hydrologic and water quality predictions;

e. Measuring sedimentation rates;

f. Sampling fish and wildlife populations to determine habitat utilization, species abundance and diversity; and

g. A description shall be included outlining how the monitoring data will be evaluated by agencies that are tracking the progress of the compensation project. A monitoring report shall be submitted consistent with the periods identified in MVMC 15.40.110(E). The compensation project shall be monitored for a period necessary to establish that performance standards have been met, but not for a period less than five years.

6. Contingency Plan: Identification of potential courses of action, and any corrective measures to be taken when monitoring or evaluation indicates project performance standards are not being met.

7. Permit Conditions: Any compensation project prepared for mitigation pursuant to MVMC 15.40.110, and approved by the city shall become part of the application for project approval.

8. Demonstration of Competence: A demonstration of financial resources, administrative, supervisory, and technical competence and scientific expertise of sufficient standing to successfully execute the compensation project shall be provided. A compensation project manager shall be named and the qualifications of each team member involved in preparing the mitigation plan and implementing and supervising the project shall be provided, including educational background and areas of expertise, training and experience with comparable projects.

15.40.180 Severability

If any provision of this Chapter or its application to any person or circumstance is held invalid, the remainder of the Chapter or the application of the provision to other persons or circumstances is not affected.

Appendix A
Nomination Process for Habitats and Species of Local Importance

Habitats and species of local importance are those identified by the city, including but not limited to those habitats and species that, due to their population status or sensitivity to habitat manipulation, warrant protection. Habitats may include a seasonal range or habitat element with which a species has a primary association, and which, if altered, may reduce the likelihood that the species will maintain and reproduce over the long term.

A. Designation process. The city shall accept and consider nomination for habitat areas and species to be designated as locally important on an annual basis.

B. Habitats and species to be designated shall exhibit at least one of the criteria in subsections (1) to (3) and shall meet criteria (4) and (5).

1. Local populations of native species are in danger of extirpation based on existing trends, including:

a. Local populations of native species that are likely to become endangered; or

b. Local populations of native species that are vulnerable or declining; or

2. The species or habitat has recreation, commercial, game, tribal, or other special value; or

3. Long-term persistence of a species is dependent on the protection, maintenance, and/or restoration of the nominated habitat; and

4. Protection by other county, state, or federal policies, laws, regulations, or nonregulatory tools is not adequate to prevent degradation of the species or habitat in the city; and

5. Without protection, there is a likelihood that the species or habitat will be diminished over the long term.

C. Areas nominated to protect a particular habitat or species must represent either high-quality native habitat or habitat that has a high potential to recover to a suitable condition and which is of limited availability, or provides landscape connectivity which contributes to the designated species or habitat's preservation.

D. Habitats and species may be nominated for designation by any resident of Mount Vernon.

E. The petition to nominate an area or a species to this category shall contain all of the following:

1. A completed SEPA environmental checklist.

2. A written statement using best available science to show that nomination criteria (b) and (c) are met;

3. A written proposal including specific and relevant protection regulations that meet the goals of this chapter. Management strategies must be supported by the best available science, and where restoration of habitat is proposed, a specific plan for restoration must be provided;

4. Demonstration of relevant, feasible, management strategies considered effective and within the scope of this chapter;

5. Provision of species habitat location(s) on a map that works in concert with other city maps;

6. An economic impact (cost/benefit) analysis of proposal.

7. Documentation of public notice methods that the petitioner(s) have used. Examples of methods are listed below. Methods (b) and (f) below shall be required at a minimum.

a. Posting the property.

b. Publishing a paid advertisement in a newspaper or newsletter of circulation in the general area of the proposal, where interested persons may review information on the proposal.

Information in the notice must contain a description of the proposal, general location of the affected area and where comments on the proposal may be sent.

c. Notification to public or private groups in the affected area that may have an interest in the petition.

d. News media articles that have been published concerning the proposal.

e. Notices placed at public buildings or bulletin boards in the affected area.

f. Mailing of informational flyers to property owners within the affected area.

8. Signatures of all petitioners.

F. The Director shall determine whether the nomination proposal is complete, and if complete, shall evaluate it according to the characteristics enumerated in subsection (B) and make a recommendation to the planning commission based on those findings.

G. The planning commission shall hold a public hearing for proposals found to be complete and make a recommendation to the city council based on the characteristics enumerated in subsection (B).

H. Following the recommendation of the planning commission, the city council may hold an additional public hearing and shall determine whether to designate a Habitat or Species of Local Importance.

I. Approved nominations will be subject to the provisions of this chapter.

Appendix B
City of Mount Vernon Waters/Wetlands Reserve: Candidate Sites

1. Edgewater Park - Batture - (9.0 Acres)
2. Lion's North - Degraded Forest - (11.0 Acres)
3. Ted Reep Park - Riparian Forest
    a. 11.0 Acre Riparian Patch
    b. 30 Acres Linear Riparian
4. Haggen's/Logan Creek - Riparian - (3.0 Acres)
5. Higgins - Slope - (20.0 Acres)\
6. Bakerview Park/Trumpeter Creek
    a. Riparian Zone - (15 Acres)
    b. Slope Wetland - (3 acres)
7. Thunderbird Creek – Reaches
8. Maddox Creek - Culvert Removal
9. Lower Kulshan - Riparian - 13 City Lots - 3-4 Acres

Appendix C
Preliminary Basis of Design for Three Candidate Sites

Section 2. Severability

If any section, subsection, paragraph, sentence, clause or phrase of this ordinance or its application to any person or situation should be held to be invalid or unconstitutional for any reason by a court of competent jurisdiction, such invalidity or unconstitutionality shall not affect the validity or constitutionality of the remaining portions of this ordinance or its application to any other person or situation.

Section 3. Effective Date

This ordinance or a summary thereof shall be published in the official newspaper of the City, and shall take effect and be in full force five days after passage and publication as provided by law.

PASSED AND ADOPTED this _____ day of _____, 2007.

_____

ALICIA D. HUSCHKA, Finance Director

SIGNED AND APPROVED this _____ day of _____, 2007.

_____

BUD NORRIS, Mayor

Approved as to form:

_____ Published:

Kevin Rogerson

City Attorney